THE RELATIONSHIP BETWEEN PARTICIPATION IN COMMUNITY SERVICE-LEARNING PROJECTS AND PERSONAL AND LEADERSHIP LIFE SKILLS DEVELOPMENT IN 4-H LEADERSHIP ACTIVITIES

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Abstract

This study compared perceptions of personal and leadership life skills development of high school 4-H leadership activity participants by whether they participated in the 4-H Junior Leader Club (JLC) and/or the CHARACTER COUNTS! (CC) peer teaching program. The target population was all high school students who participated in either the CC or JLC program when both programs were available. Participants were typically 15 years old, female, white, lived in towns with a population under 10,000 and received mostly A's and B's in high school. Participants perceive they have high life skills in all areas measured by the Leadership and Personal Development Inventory (LPDI). No difference exists in perceived personal and leadership life skills development among students who participated in the CC or JLC programs, or in both. Relationships do exist between personal and leadership life skills development constructs and certain personal characteristics of the students who participated in selected 4-H leadership development activities. Future research should consider using the researcher's reconfigured scales from the LPDI to study 4-H participants involved in more structured 4-H experiences.

Introduction

In 1997, the Division Leader for Louisiana 4-H Youth Development brought together a group of experts to develop a training component in the Youth Voices and Action Campaign training materials. This training curriculum (Seals, 1998) was a step-by-step guide for implementing community service-learning (CSL) projects by a 4-H'er or 4-H club. It provided youth a step-by-step process and a checklist for planning and conducting community service-learning projects. It was also a teaching tool for preparing community service organizers, youth volunteers, and community collaborators.

In 4-H community service-learning, youth learn and develop through active participation in thoughtfully organized service experiences that meet community needs; that are coordinated in a collaborative effort between 4-H and other individuals or groups; that provide structured reflection time for youth to think, talk and write about what they experience; that provide opportunities for young people to apply 4-H project skills and knowledge in real life situations in their own communities; that enhance what is taught in 4-H by extending learning into the community; and that entail long-term involvement which may last from one to six months or longer; and that help foster a sense of caring for others. Through the experiential learning process, youth internalize knowledge and gain the ability to apply life skills appropriately.

The experiential learning process is based on five steps. The steps include experience (do it), reflection (what happened), process (what's important), generalize (so what), and application (now what). This process was created from Kolb and Fry's model of four learning styles elements: concrete experience, observation and reflection, the formation of abstract concepts and testing in new situations (Kolb & Fry, 1975). The experiential learning process begins with a person carrying out a particular action (experience) and then

seeing the effect of the action in this situation (reflect). The third step is to understand these effects in the particular instance so that if the same action was taken in the same circumstances it would be possible to anticipate what would follow from the action (process). Then, the fourth step is to understand the general principle under which the particular instance falls (generalize). When the general principle is understood, the last step, according to Kolb, is its application through action in a new circumstance within the range of generalization (Smith, 2001). Community service-learning is built on the experiential learning process that provides young people with opportunities to develop necessary life skills by having the learners actively engaged in posing questions, investigating, experimenting, being curious, solving problems, assuming responsibility, being creative, and constructing meaning.

Review of Literature

Personal and leadership life skills are developed through 4-H subject-matter projects and community service-learning projects. The development of these skills allows youth to cope with their environments 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; Dewey, 1938). William James, John Dewey and William Heard Kilpatrick, along with C.S. Pierce, laid the groundwork for personal and leadership life skills development through learning by doing and service to the community (Dewey; James, 1907; Kemerline, 1997; Kilpatrick, 1927; Pierce, 1878). The concept of "learning by doing" is set in the pragmatic philosophical thought process. The term pragmatism was first introduced by Pierce in an article entitled "How to Make Our Ideas Clear." Pierce believed in putting ideas to the test and then observing the consequences. Thus, the birth of pragmatism. William James, one of the founding fathers of the American Pragmatist Movement beginning around 1907, considered pragmatism to be both a method for analyzing philosophic problems and a theory of truth (James). John Dewey was greatly influenced by William James. Dewey believed the mind is an instrument for realizing purposes. For him, pragmatism was a way to show how the conclusions of science affect the values guiding human conduct (Kemerline; Dewey). Dewey believed that individuals should be educated as social beings, capable of participating in and directing their own social affairs and that education is a process of living and not a preparation for future living (Kraft, 1996). He wrote that actions directed toward the welfare of others stimulate academic and social development. He viewed education as a way to free the individual to engage in continuous growth directed toward appropriate individual and social aims (Ozmon & Craver, 1999).

Youth wish to feel they are valuable and are making important contributions. A Gallup poll identified the desire of youth to be involved at significant levels within their communities (Caldwell, 1994). When compared to adults, the poll indicated that youth ages 14 to 17 are volunteering at the same rate or higher. The two most frequently cited reasons for volunteering were "wanted to do something useful" (47%) and they "thought they would enjoy the work" (38%) (Groff, 1992).

Community Service Learning

Community service-learning projects are one method for increasing personal and leadership life skills development opportunities for youth. Community service-learning projects offer teens opportunities to practice skills and reflect on experiences to learn more about themselves (Boyd, 2001). It is a pedagogical tool used to enhance the meaning and impact of traditional course/project content. Connecting service directly with projects can help develop a well-informed, critically-thinking, and civically-engaged citizenry (Sax & Astin, 1997). Through this experiential learning process, youth internalize the knowledge and gain the ability to apply the skills appropriately. As a method of educational and informational delivery, the experiential learning model emphasizes that clients and youth learn and develop through active participation in thoughtfully organized

experiences that meet actual community needs and that are coordinated in on-going collaboration among agencies (Simpson, 1998). Much like on-the-job training and internships, community service-learning seeks to provide an educational experience that is tied to the "real world." To provide these experiences for youth, relationships must shift from youth being passive recipients to being active members of a team which decides on and carries out the programs (Israel & Ilvento, 1995). Community service-learning has had a 20-year history at the university level and a 15-year history at the secondary level. In a report titled, *What do we know about the impact of field based program on students,* presented at the annual conference of the National Society of Experiential Education in 1993, Giles and Eyler (as cited in Hesser, 1995) cited the lack of research in the field. Giles and Eyler indicated that most of the reported research is anecdotal, based upon self-reported data, and rarely documents learning outcomes.

Community service-learning projects are most often a partnership between a community-based program/agency and a youth serving organization or educational institution. In a study by McLaughlin (2001) from 1987 to 1999, he and his colleagues came to know hundreds of young people and their work in approximately 120 youth organizations in 34 different communities, from Massachusetts to Hawaii. Despite the challenges these young people faced in everyday life, compared to many typical young people in the U.S., those youth with high levels of participation in community organizations were 26% more likely to have received recognition for good grades and 20% more likely to rate their chances of going to college as very high. They were nearly twice as likely to view themselves as worthy persons and 13% more likely to believe that they would have a job that they enjoyed. Supporters of community service-learning believe students involved in community service-learning experiences are more tolerant of others different from themselves, have a greater appreciation for other cultures, find rewards in helping others, and feel more connected with their communities (Hinck & Brandell, 1999).

Community Service-Learning and Character Education

According to the Josephson Institute of Ethics (2001), two of five high school age students and one-third of college students have cheated on an exam. More than one-third of 19 to 24 year old males and one-fifth of females said they would lie to get a job and half the college males and 38% of the females said they had driven an automobile while drunk. The Character Education Partnership (CEP) (1998) supports the concept that there is an integral relationship between community service-learning and character education. The universal values in all phases of school include proactive strategies and practices that help children to not only understand core ethical values, but to care about and act upon them. The South Dakota Survey of the CHARACTER COUNTS! Program (South Dakota State University, 2000), one of the most comprehensive assessments of character education, found a dramatic reduction in crime, drug use, suspension rates, and misbehavior among middle and high school students who participated in the CHARACTER COUNTS! program. Service-learning can be another means of providing an innovative opportunity to connect academic learning and the values emphasized in character education with real-world application. By doing so, service-learning helps all children meet challenging academic standards and integrate core ethical values into their lives (RMC Research Corporation).

Development of Personal and Leadership Life Skills

Carter and Spotanski (1989) studied self-reported perceptions of personal and leadership life skills of selected high school students in Iowa. A descriptive case study was used as the research design. The results showed that students who had served as an officer in a student or community organization had developed personal and leadership life skills significantly higher than those students who had not served as an officer. Significant differences in perceptions of all 10 personal and leadership constructs were indicated by those students who had served as committee chairs in

student or community organizations and those who had not. Students who had served as committee chairs had higher skills as indicated by each of the 10 constructs.

Mefford et al. (1999) measured 4-H member perceptions related to leadership. These skills were identified in Carter's (1989) Personal and Leadership Inventory. Responses on the individual ability of leadership skills indicated that 4-H'ers rated themselves highly in their ability to communicate and make decisions and in their self-esteem. 4-H members who spent more than 16 hours a week on 4-H work reported a higher level of decision making abilities. 4-H members who spent more than 5 hours in 4-H activities per week were twice as likely to report a higher level of understanding of self. Also, approximately 89% of respondents agreed or strongly agreed that they had the ability to communicate, while 94% of respondents indicated having a high ability to understand themselves. Finally, 93% of respondents reported having a higher ability to make decisions (Mefford et al.).

In 2000, Richey conducted a study investigating if participation in 4-H provided opportunities for youth to learn and practice leadership life skills. The study concluded that 4-H members perceived themselves to have developed leadership life skills at a higher level of frequency than non-4-H members. The study concluded that participation in 4-H promoted leadership life skills development and that the research questions concerning leadership life skills development show that there is a significant difference among 4-H'ers and non-4-H'ers in leadership life skills development for the understanding of self, communicating, relating to others, learning/sharing, managing and making decisions, and working with groups scales.

Relating Personal Characteristics to Life Skills Development

Seevers and Dormody (1994) conducted a study using the Youth Leadership Life Skills Development Scale to determine predictors of youth leadership life skills development among 1992-1993 senior 4-H members in Arizona, Colorado, and New Mexico. Four variables, participation in 4-H leadership activities, achievement, ethnicity, and gender, explained significant amounts of the variance in the Youth Leadership and Life Skills Development (YLLSD) scores after controlling for self-esteem, years in 4-H, age, ethnicity and place of residence. Participation in 4-H leadership activities had a positive relationship with youth leadership life skills development, explaining 12.6 % of the variance in YLLSDS scores. Minority 4-H members were found to have slightly higher youth leadership life skills development scores than nonminority members, explaining 3.3% of the variance in YLLSDS scores. Achievement expectancy had a slightly positive relationship with youth leadership life skill development, explaining 1.9% of the variance in YLLSDS scores. Gender was found to predict 1.7% of the variance in YLLSDS scores among senior 4-H members. Female members had higher youth leadership life skills scores than males.

Statement of the Problem

The Cooperative Extension Service is constantly facing demands by funding agencies for evidence of programming impacts. In 1993, the 103rd U.S. Congress enacted the Government Performance and Results Act (GPRA). One purpose of this Act is to help federal managers improve service delivery by requiring that they plan for meeting program objectives and by providing them with information about program results and service quality. Adequate evidence does not exist that documents the effectiveness of 4-H community service-learning projects. This study was designed in an effort to provide some evidence of the effectiveness of a community service-learning project as related to the specific development of personal and leadership life skills in high school 4-H leadership activity participants.

Purpose and Objectives

The purpose was to compare self-reported perceptions of personal and leadership life skills (Carter, 1989) development of high school 4-H leadership activity participants by whether they

participate in the 4-H Junior Leader Club (JLC) and/or CHARACTER COUNTS! (CC) peer teaching programs. A formal CC community service-learning project has six hours of participation in one project area that incorporates a structured reflection component as part of the overall service-learning experience. A non-formal JLC community service project is a one-time service project that does not incorporate a reflection component. The objectives were:

1. To describe students who participate in 4-H Junior Leader Clubs and/or CHARACTER COUNTS! peer teaching on selected demographic and personal characteristics.
2. To describe students who participate in 4-H Junior Leader Clubs and/or CHARACTER COUNTS! peer teaching on personal and leadership life skills development as measured by the Leadership and Personal Development Inventory (Carter, 1989).
3. To compare the personal and leadership life skills development as measured by the Leadership and Personal Development Inventory (Carter, 1989) by whether students participate in 4-H Junior Leader Clubs, CHARACTER COUNTS! peer teaching, or both 4-H Junior Leader Clubs and CHARACTER COUNTS! peer teaching.
4. To determine if a relationship exists between personal and leadership life skills development as measured by the Leadership and Personal Development Inventory (Carter, 1989) and selected personal and demographic characteristics.

Figure 1 provides an illustration of the researcher's model for this study.

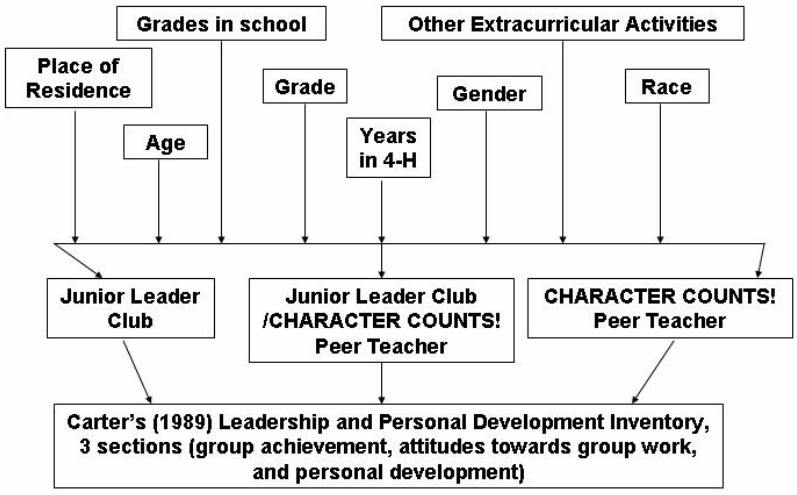

Figure 1. Phelps-Kotrlik model for personal and leadership life skills development for 4-H leadership activity participants.

Methods

Population and Sample

The target population was all Louisiana high school students who participated in either CC or JLC during the 2003-2004 school year. Therefore, this study was limited to those counties that have both CC and JLC. Youth in grades 9-12 are eligible for JLC membership; however, some counties allow youth to join in grades as low as seventh. CC peer teachers are typically in grades 9-12. Parish-level 4-H agents were asked to submit a CC and JLC participants mailing list. The combined mailing lists contained the names and mailing addresses of 1,193 participants. Cochran's (1977) sample size formula was used to determine the sample size of 321.

Instrumentation

The Leadership and Personal Development Inventory (LPDI) developed by Carter (1989) was selected for use in this study. Respondents used a seven point scale to rate each of the 76 items and the mean responses were interpreted as follows: 1.00-1.49 - strongly disagree, 1.50 - 2.49 - disagree, 2.50 - 3.49 - slightly disagree, 3.50 - 4.49 - neither agree nor disagree, 4.50 - 5.49 - slightly agree, 5.50 - 6.49 - agree, and 6.50 - 7.00 - strongly agree.

As a result of minimal internal consistency coefficients for two of the 10 scales and confirmatory factor analyses that did not result in individual items loading on factors in the same way reported by Carter (1989), it was determined that the scales reported by Carter were not valid measures of the personal and leadership attributes of 4-H participants in Louisiana. Because the individual items had been judged to be valid measures of the personal and leadership attributes of 4-H participants in Louisiana by the researcher and the instrument validation team, the researcher utilized exploratory factor analysis procedures as recommended by Hair, Black, Babin, Anderson, and Tatham (2006) to restructure the items into factors valid for Louisiana's 4-H participants. The 76 items in the LPDI were divided into three major sections identical to those used by Carter in his research and supported by the literature. Those three major areas were group achievement (27 items), attitude toward group work (25 items), and personal development (24 items). Since the individual items were based on the personal and leadership life skills development literature, the decision was made to use a factor loading level of .50 as the basis for including items in individual factors. The .50 loading was used to strengthen each re-configured scale in Carter's Leadership and Personal Development instrument and eliminated items that were less related to the constructs. The internal consistency coefficients for the scales ranged from .73 to .86 which indicates that all seven scales possessed either extensive or exemplary reliability according to Robinson, Shaver and Wrightsman (1991). In addition, even though Carter had used individual factor scales plus overall scales as reported above, the decision was made to develop individual factor scales only for the purpose of this research.

Data Collection

Application for exemption from the Institutional Oversight Committee was applied for through the Review Board for Human Research Subject Protection. Exception was granted by the committee because participants were not identified in the study and the responses could not harm the subjects if made public. A cover letter addressed to each subject, a survey instrument, and a stamped, self-addressed envelope were mailed to the subjects selected to participate in this study. After two weeks, a second cover letter addressed to each subject, a survey instrument, and a stamped, self-addressed envelope were mailed to those subjects who had not responded after the first mailing. Four weeks after the initial mailing, an e-mail was sent to the subjects' parish 4-H agents. This message asked the agent to personally contact the subject within the next week after receiving the e-mail message and encourage the subjects to complete and return the survey. This method of encouraging responses was utilized because the researcher did not have access to the subjects' home phone numbers because of federal child protection regulations and

university policies designed to protect human subjects. Three days after sending the e-mail message, a third cover letter addressed to each youth, a survey instrument, and a stamped, self-addressed envelope were mailed to each participant who had not responded after the first two mailings.

Data Analysis

Descriptive statistics were used to describe personal and demographic characteristics, and personal and leadership life skills development. Analyses of variance were used to determine if differences existed in life skill development among the three groups in the study (CC only, JLC only, or both CC and JLC). Appropriate correlation coefficients (r, r_{pb}) were used to describe relationships between variables. Forward multiple regression analysis was used to determine if a model existed that explained a significant proportion of the variance in personal and leadership life skill development. The alpha level was preset at .05 for all statistical tests. After the scales were reconfigured, independent samples *t*-tests were calculated to determine if the scale means differed significantly between those who responded after the first two mailings and those who responded after the 4-H agent was contacted via e-mail and asked to encourage the subjects to respond. A statistically significant difference existed in the group directing scale mean ($t = 2.65$, $p = <.01$) between the mail and follow-up responses. Since a significant difference existed for one of the scales, the data could not be considered representative of all participants in JLC and CC programs. Therefore, the data reported in this study should be considered as only representative of the respondents.

Findings

The sample consisted of 321 youth. A total of 165 youth returned surveys with 121 in the 1st mailing, 29 in the 2nd mailing and 15 as a result of the telephone follow-up of non-respondents described in the data collection section (44.2% response rate). Since the youth could not be contacted directly for follow-up purposes as stipulated by the university institutional review board, this response rate was excellent.

Personal Characteristics of High School Students

Three-fourths of the students in the population were female ($n = 124$ or 75.6%) and white ($n = 126$ or 76.8%), with almost one-fourth being black or African-American ($n = 23$ or 14.0%) or other races ($n = 15$ or 9.2%). More than two-thirds ($n = 110$ or 67.1%) lived in a town with less than 10,000 population, while 18.9% ($n = 31$) lived on a farm, 12.2% ($n = 20$) lived in a town with a population of 10,001-50,000, and 0.6% ($n = 2$) lived in a town with a population over 50,000. Information on the other personal and demographic characteristics of the respondents is presented in Tables 1 and 2.

Table 1
Personal Characteristics of Responding Students who Participated in 4-H Junior Leader Clubs and/or CHARACTER COUNTS! Peer Teaching (Categorical Data)

Personal Characteristics	*n*	*%*
Membership in Other Extracurricular Activities[a]		
Church	135	82.3
School or Community Service Organizations (BETA, etc.)	100	61.0
Varsity Athletics	75	45.7
Departmental Clubs (science club, math club, FFA, FHA, etc.)	72	43.9
Special Interest Groups (chess, drill team, girl/boy scouts, etc.)	47	28.7
Student Government	41	25.0
Grades In School		
Mostly A's	77	47.0
Mostly B's	61	37.2
Mostly C's	18	11.0
Mostly D's	2	1.2
Mostly F's	1	.6
Non-Respondents	5	3.0
Total	164	100.0

Note. $N = 164$.
[a]Responses do not sum to 100% because respondents could hold membership in multiple extracurricular activities. Variable was dummy coded as 1 = yes to membership and 0 = no to membership. Variable was then totaled. Participants could hold membership in 0-6 extracurricular activities.

Table 2
Personal Characteristics of Responding High School Students who Participated in 4-H Junior Leader Clubs and/or CHARACTER COUNTS! Peer Teaching (Interval Data)

Personal Characteristics	*Range*	*n*	*M*	*SD*
Age	12-19	164	15.32	1.64
Grade	7-12	164	9.68	1.67
Years in 4-H	1-9	164	4.70	2.73
Years in 4-H Junior Leader Club	1-6	162	1.51	1.59
CHARACTER COUNTS! lessons taught	0-60	163	6.59	10.98
Years as a CHARACTER COUNTS! peer teacher	0-5	160	1.18	1.21

Note. $N = 164$.

Personal and Leadership Life Skills of High School Students

The data for the students' personal and leadership life skills development as measured by the Leadership and Personal Development Inventory (Carter, 1989) and after revisions indicated by exploratory factor analyses are presented in Table 3. Due to the limits on the length of this manuscript, detailed factor analysis results are not presented. The scale grand means indicated that the respondents agreed with the construct represented by the items in the group cohesiveness, group drive, group interaction, guidance, citizenship and self-assurance scales, while they slightly agreed with the construct represented by the items in the group directing scale.

Table 3
Items, Means and Standard Deviations for the Seven Scales in the Leadership and Personal Development Scale (Carter, 1989) After Revisions Based on Exploratory Factor Analyses

Items	*M*	*SD*
Group Cohesiveness	**5.60**	**.80**
17. Group members are friendly.	5.99	1.21
22. Members understand what they are to do.	5.98	.94
16. Our group works well together.	5.84	1.08
24. Members can depend upon each other for help.	5.84	1.18
23. Members enjoy working with each other.	5.80	1.12
27. Members support group decisions.	5.76	1.11
1. Our group is really close.	5.35	1.15
14. Our group is the best group in the school.	5.01	1.54
15. Members of the group are best friends with each other.	4.74	1.58
Group Drive	**5.75**	**.83**
11. Our group does a good job.	6.09	.97
3. Group members want to do a good job.	6.07	1.05
8. Members like working on group activities.	5.84	1.05
6. Our group achieves its goals.	5.83	1.10
9. Members follow through with assigned responsibilities.	5.68	1.13
5. Our group is enthusiastic about it activities.	5.51	1.22
20. Members assume responsibility in the group.	5.30	1.35
Group Interaction	**5.99**	**.67**
33. I listen carefully to opinions of group members.	6.07	1.00
35. I am willing to accept different ways of doing things.	6.02	1.00
37. I believe that group members are responsible persons.	5.79	1.14
40. I am able to communicate goals and objectives to group members.	5.74	1.18
41. The planning of activities should be a group effort.	6.28	1.00
47. I am confident in the ability of group members.	5.84	.96
48. I believe in dividing the work among group members.	6.22	.92
49. I believe group members are capable.	6.15	.97
50. I am able to check on the progress of group activities without interfering.	5.56	1.24
52. I am a good listener.	6.19	.92
Group Directing	**4.49**	**1.00**
29. I am confident of my own abilities.	5.90	1.06
43. I feel comfortable being a group leader.	5.57	1.51
28. I prefer to do things myself to ensure they get done.	4.77	1.60
42. It is easier to do things myself.	4.14	1.62
32. I spend time doing work for other group members which they could do for themselves.	3.30	1.85
30. If it needs to be done right, only I can do it.	3.23	1.66
Guidance	**5.76**	**.93**
63. I am respected by others my age.	5.94	1.10
64. I can explain difficult ideas to others to help them understand.	5.86	1.09
55. I am recognized as a leader by those of my own age.	5.52	1.28

Items	*M*	*SD*
Citizenship	**6.38**	**.59**
68. I respect the property of others.	6.56	.70
59. I feel responsible for my actions.	6.44	.83
74. I respect the opinions, feelings, and emotions of people of different ages.	6.43	.85
65. I am willing to listen to the ideas of others.	6.39	.76
61. I believe that every citizen should vote when they are of age.	6.33	1.14
56. I enjoy learning about people with different backgrounds and experiences.	6.27	.92
58. I live by the beliefs I have learned.	6.23	.88
Self-Assurance	**6.20**	**.70**
67. I understand myself.	6.12	1.07
70. I can lead a discussion.	5.79	1.26
72. I can cooperate and work in a group.	6.44	.67
75. I am sure of my abilities.	6.17	.93
76. I can accept who I am.	6.48	.86

Note. Scale: 1 = Strongly Disagree. 2 = Disagree, 3 = Slightly Disagree, 4 = Undecided, 5 = Slightly Agree, 6 = Agree, 7 = Strongly Agree. The factor loading for all items in all reconfigured scales was .50 or higher.

Difference in the Personal and Leadership Life Skills Development Among Groups

Personal and leadership life skills development as measured by the Leadership and Personal Development Inventory (Carter, 1989) were compared by whether students participated in JLC, CC, or both. The analyses of variance revealed that no significant differences existed in the seven personal and leadership life skills development scale scores by whether the students were in CC, JLC, or both. Due to space limitations, the ANOVA table has not been included in this manuscript.

Relationships Between Personal and Leadership Life Skills Development and Personal Characteristics

These analyses sought to determine whether a relationship existed between personal and leadership life skills development as measured by the Leadership and Personal Development Inventory (Carter, 1989) and selected demographic and personal characteristics. Pearson and point-biserial correlations were used to analyze the data. Due to space limitations, the correlations table has not been included in this manuscript. The effect sizes for the correlations were interpreted using Davis' (1971) descriptors. The following statistically significant correlations existed: 1) Age had a low positive association with group cohesiveness (r = .18), group drive (r = .20), group interaction (r = .20), guidance (r = .19), and self-assurance (r = .23); as age increased, the students' perceptions of their personal and life skills in these areas increased. 2) Gender had a low association with group interaction (r_{pb} = .22) and citizenship (r_{pb} = .27); female students had higher life skills in both areas than males. 3) Place of residence (specifically, in a town with a population between 10,000 and 50,000) had a low positive association with group cohesiveness (r_{pb} = .15) while living on a farm had a low negative association (r_{pb} = -.16) with guidance; students in this size town (10,000-50,000) had higher group cohesiveness life skills than students in other areas of residence (farm, town <10,000, town >50,000) while students who lived on a farm had lower guidance skills than students in the other residence groups. 4) Years in 4-H had a low association with group cohesiveness (r = .16); group cohesiveness increased as years in 4-H increased. 5) Years in CC had a low positive association with group drive (r = .20) and group interaction (r = .16); life skills in both areas increased as years in CC increased. 6) Grades in school had a low positive association with guidance (r = .18) and self-assurance (r = .26) and a moderate association with citizenship (r = .30); life skills increased in all three areas as grade in school increased. 7) The number of extracurricular activities in which the student was involved had a low positive association with guidance (r = .18) and self-

assurance (r = .18); as involvement in extracurricular activities increased, life skills in these areas increased. No relationships existed between the personal and leadership constructs and race, years in JLC, and number of CC lessons taught.

Conclusions and Recommendations

Conclusions

Caution should be exercised in generalizing these findings beyond the respondents. One of the seven scale means (Group Directing) was significantly different between the mail and follow-up responses (t = 2.65, p = <.01); therefore, the findings cannot be generalized to the population of JLC and CC participants.

Participants have high skills levels in all seven life skills areas. This conclusion supports the results reported by Carter and Spotanski (1989) and Mefford et al. (1999). However, this study does not provide conclusive evidence as to whether the high levels of skills are due to participation in CC or JLC, or perhaps students who already have high skills in these areas may choose to participate in CC and/or JLC. The study also sought to determine if differences existed in perceived life skill development by participation in (a) JLC alone, (b) CC peer teaching alone and (c) both JLC and CC peer teaching. No difference exists in the perceived personal and leadership life skills development among these three groups on any of the seven life skills development constructs. This conclusion suggests that JLC participants participating in less structured community service projects are just as likely to perceive their personal and leadership life skills development at the same level as those participants who are involved in a more structured community service-learning project as a CC peer teacher. This would indicate that the participants in this study are developing skills on the same level in either JLC or as a CC peer teacher. Likewise, those participating in both did not perceive life skill development at a significantly higher level. It is also possible that years in 4-H and involvement in other 4-H activities may have comparable impact on life skills development as the CC peer teaching. The CC peer teaching experience, while formal in design, may not be as comprehensive nor long enough to show significant differences compared to the JLC experience.

Relationships exist between certain personal and leadership life skills development constructs and selected personal characteristics of the students who participated in selected 4-H leadership development activities. As age and years as a CC peer teacher increase, their group interaction skills tend to increase. As age and years in 4-H increase, group cohesiveness tends to increase. As age, grade, and years as a CC peer teacher increase, group drive skills increase. As age, grade, membership in other extracurricular activities, and grades in school increase, guidance skills increase. However, if respondents' place of residence is a farm, there is a low negative association with guidance. Female citizenship skills are higher than males; this conclusion partially supports the conclusion by Seevers and Dormody (1994) that female members had higher youth leadership life skills scores than males. The higher students perceived grades in school, the more their citizenship skills increase. As age, grade, grades in school, and membership in extracurricular activities increase, so do their self-assurance skills.

Recommendations

4-H should strive to offer leadership activities that can compete with other extracurricular activities to impact the development of personal and leadership life skills. 4-H needs to recruit high school members at the early end of the age continuum since age was related to several of the personal and leadership life skills constructs. There is also a need to keep members active in the leadership activities long-term since years of participation is related to several of the personal and leadership life skills constructs. Participants should be given the opportunity to participate in decision making in the planning and implementation of these activities. One such way would be to ensure that reflection is included as part of every activity if it is not currently being utilized. This would give participants opportunities to

understand the context of their projects, discuss their feelings and concerns, and suggest ways to ensure greater success.

In this study, 15 was the majority age, possibly indicating that 4-H should focus its efforts on the younger (13-15 years) age group to develop high school leadership activities, or that 4-H needs to find ways to attract the older students if they wish to keep them involved in CC or JLC. Also, there needs to be more of a long-term commitment among the participants in JLC and CC peer teachers. Examining the reward system for these participants could influence long-term participation. Finally, 4-H must look at where its audience resides. While the majority of participants in this study lived in towns with a population below 10,000, the majority of the state's population lives in urban areas. Additional staffing and member recruitment in urban areas could increase leadership opportunities for urban youth.

Further research should consider using the researcher's reconfigured scales from Carter's (1989) Leadership and Personal Development Inventory survey to study 4-H participants involved in a more structured 4-H experience that has requirements to complete membership. For example, JLC members would have to attend a certain number of club meetings, teach a certain number of educational classes, plan and implement a community service-learning project and complete a certain number of activities in the 4-H Leadership project book. The results from this group could then be compared with JLC participants who were simply required to be members.

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