Texas 4-H Members' Sense of Community Engagement and Attachment

Emily R. Perdue
West Virginia University, emily.perdue@mail.wvu.edu

James R. Lindner
Auburn University, jrl0039@auburn.edu

Gary E. Briers
Texas A&M University, g-briers@tamu.edu

Follow this and additional works at: https://scholarsjunction.msstate.edu/jhse

Part of the Social and Behavioral Sciences Commons

Recommended Citation

Texas 4-H Members' Sense of Community Engagement and Attachment

Emily R. Perdue
West Virginia University

James R. Lindner
Auburn University

Gary E. Briers
Texas A&M University

Previous researchers found that youth in 4-H were four times more likely to actively contribute to their communities, two times more likely to be civically active, and five times more likely to graduate from college than non-4-H members. In addition, youth who were more actively involved in community engagement tended to perform at an increased academic achievement level and were more likely to go to college, according to previous studies. The results of the research reported here described participants' community service and engagement activities both in and outside of 4-H and their attachment to their home communities. Respondents were mostly residents of rural areas, farms, or small towns and cities. They were satisfied with where they lived, and they reported that contributing to their community was important to them and believed it made a positive influence on their life. Most participants also indicated that the community in which they lived and the people closest to them were important parts of their lives and contributed positively to their development. By determining current 4-H members' level of community attachment, Extension professionals can better understand the influence a community and its stakeholders have in a young person's leadership development and aspirations.

Keywords: sense of community, community attachment, 4-H, youth development, community engagement

Introduction

A frequently cited study by Tufts University and the Institute for Applied Research in Youth Development (Lerner et al., 2013) found that youth in 4-H, compared to their peers, were four times more likely to actively contribute to their community, two times more likely to be civically active, and five times more likely to graduate from college. Youth who were more actively involved in community engagement tended to perform at an increased academic achievement

level and were more likely to go to college (Eccles & Barber, 1999). Brennan et al. (2007) presented the need for Extension program developers to better understand the role youths play in community development and the impact of 4-H programming in "engaging youth through interactions with the local community" (para 1).

Employers are looking for college graduates who have completed community-based field projects that give students experience working with others and the ability to solve problems important to their community (Hart Research Associates, 2013). Extension fills this gap by "engaging youth through interactions with the local community, particularly in the implementation of 4-H programs" (Brennan et al., 2007, para 1).

One such extension program is the Engaging Youth, Serving Community program. The objective of this program is to improve the abilities of youth and adults to "collaborate with diverse community members to identify local issues" and develop "opportunities for youth and families in rural communities for positive youth development experiences during out-of-school time" (Peterson, 2016, p. 4). The overall outcome of the program is to ensure that both youth and adults develop a more positive attitude toward the role and involvement of youth in communities (Peterson, 2016). Many studies have reported that 4-H alumni were more likely than their non-4-H counterparts to be involved in their community and hold leadership positions as adults (Boleman et al., 2008; Boyd et al., 1992; Ladewig & Thomas, 1987; Merten et al., 2014; Radhakrishna & Sinasky, 2005).

Extension professionals can better understand the influence that a community and its stakeholders have in youth leadership development and aspirations from the 4-Hers' perspectives by determining current 4-H members' level of community attachment. Hastings et al. (2011) identified a need to examine the relationship between youth leadership life skills and sense of community. Pretty et al. (1996) indicated that due to developmental stage and age, older adolescents reported a lower sense of community. When youth are civically engaged and feel a strong sense of community, they help increase the social capital and well-being within their communities, thus impacting individual, organizational, and societal change.

Theoretical Framework

The theoretical framework for this study was based on McMillan and Chavis' (1986) theory of sense of community. Sense of community is defined as the "feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (McMillan & Chavis, 1986, p. 9). A community can refer to either territorial/geographic communities such as neighborhoods or relational communities such as professional organizations or churches (McMillan & Chavis, 1986). The theory of sense of community includes four components: membership, influence, integration and fulfillment of needs, and shared emotional connection.

Membership is the sense of belonging one feels toward their community (McMillan & Chavis, 1986). Influence refers to the ability to impact the decisions of a community. Integration and fulfillment of needs refers to the "degree that communities successfully facilitate person-environment fit (meeting of needs) among members," leading them to develop a sense of community (McMillan & Chavis, 1986, p. 15). A shared emotional connection is the ability to identify with or be a part of a shared history of the community. This includes the quality of interactions between people and how often they interact with each other. A greater feeling of community is achieved when more people interact through high-quality interactions (McMillan & Chavis, 1986). Sense of community is studied in terms of communication between neighborhood members and how their experiences helped them form attachments to their community.

Purpose and Objectives

The purpose of this study was to determine Texas 4-H members' sense of community. The specific objectives of the study were:

1. Describe participant demographics, specifically (a) grade level, (b) gender, and (c) ethnicity.
2. Describe participants' perceptions of their community, specifically (a) where they currently lived, (b) where they preferred to live, and (c) their level of community engagement.
3. Determine participants' sense of community.

Methods and Procedures

We used survey research methods to conduct this study. The target population for the study were members of the Texas 4-H & Youth Development Program who were enrolled for the 2015-2016 year, were between the ages of 12 and 18, and had an email address. Stratified random sampling was used to select equal numbers of participants in grades seven through twelve. The questionnaire used a seven-point scale: *Strongly Disagree* = 1, *Moderately Disagree* = 2, *Disagree* = 3, *Neither Agree nor Disagree* = 4, *Agree* = 5, *Moderately Agree* = 6, and *Strongly Agree* = 7 and consisted of 12 statements. The true limits for the scale for interpretation were Strongly Disagree = 1.00 – 1.49, Moderately Disagree = 1.50 – 2.49, Disagree = 2.50 – 3.49, Neither Agree nor Disagree = 3.50 – 4.49, Agree = 4.50 – 5.49, Moderately Agree = 5.50 – 6.49, and Strongly Agree = 6.50 – 7.00.

The Interpersonal Community Engagement Scale (hereafter ICE) was developed by Corrigan (2004) and selected because it measures participants' "level of communication and involvement to better gauge the connection one feels to their neighborhood, and to empirically measure if strong community relationships have an effect on a youth's behaviors and educational attitudes" (pp. 36–37). Contribution to the community measures participants' self-perceived leadership

skills developed through service to the community. In addition to the ICE and contribution to the community scales, the questionnaire asked respondents to indicate their grade level, place of residence, volunteer participation, and participation in youth group and religious activities in the context of respondents' relational communities.

We conducted a pilot test with members of the Texas A&M University Collegiate 4-H Club to establish face and content validity of the instrument. Thirty members of the collegiate 4-H club responded to the questionnaire. We asked a total of 793 4-Hers to participate in this study; eight opted out of completing the survey instrument. We received 178 responses and deleted 15 due to incomplete data, resulting in a 22.5% return rate and a final sample size of $n = 163$. Our data sample is comprised of $f = 27$ seventh graders, $f = 28$ eighth graders, $f = 32$ ninth graders, $f = 27$ tenth graders, $f = 22$ eleventh graders, and $f = 27$ twelfth graders, suggesting that the sample was not skewed in terms of respondents' grade levels.

We assessed internal consistency of the scale using Cronbach's alpha coefficients. The alpha level for both the pilot test and the formal study was $r = .80$. A reliability of .80 is generally acknowledged as an acceptable rate of internal reliability (Bryman, 2012). Table 1 displays the reliability levels for the constructs of interpersonal community engagement and contributor to the community. We analyzed data using the Statistical Package for Social Sciences Version 23.0.

Table 1. Reliability Levels of Internal Scales

		α Levels	
Internal Scale	**Number of Items**	**Pilot Study**	**Formal Study**
Interpersonal Community Engagement	12	.80	.80
Contributor to Community	8	.90	.94

Note. Reliability levels ≥ .80 were considered acceptable.

Findings

Table 2 displays the distribution of participants by gender and ethnicity. Approximately 43.4% $(n = 71)$ were male, and 55.5% $(n = 91)$ were female. Most participants $(n = 132, 81.0\%)$ identified as White or Caucasian.

Table 2. Distribution of Participants by Gender and Race

Characteristic	*f*	%
Gender		
Female	91	55.83
Male	71	43.56
No Answer	1	00.61
Race		
White or Caucasian	132	80.98
Latino or Chicano	14	8.59

Characteristic	f	%
Black or African American	5	3.07
Multiracial	5	3.07
Other*	3	1.84
Asian American	2	1.23
Missing or chose not to answer	2	1.23
Total	163	100.00

Note. *Other specified as Scottish, American Indian, and Hispanic.

As displayed in Table 3, 35% of respondents lived in a small city or town ($f = 57$). Approximately 28% lived in the country but not on a farm ($f = 45$). Almost 23% of respondents ($n = 37$) reported they live on a farm. Collectively, 86% of the sample were rural residents.

Table 3. Description of Current Community

Where do you currently live?	f	%
In a small city or town (under 50,000 people)	57	34.97
In the country, not on a farm	45	27.61
On a farm	37	22.70
In a medium-sized city (50,000-100,000 people)	15	9.20
In a large city (more than 100,000 people)	9	5.52

Table 4 describes where participants would prefer to live. Approximately 23% of participants ($f = 38$) preferred to live on a farm. Twenty percent ($f = 32$) preferred to live in the country but not on a farm, while 29 (17.8%) preferred to live in their present community.

Table 4. Description of Community Preference

Where would you prefer to live?	f	%
On a farm	38	23.31
In the country, not on a farm	32	19.63
My present community	29	17.80
I don't know where I prefer to live, or I'm undecided	21	12.88
In a medium-sized city (50,000-100,000 people)	17	10.43
In a small town (under 50,000 people)	16	9.82
In a large city (more than 100,000 people)	9	5.52
Chose not to answer	1	0.61

Table 5 displays how often respondents participated in community and volunteer activities. Almost 86% of respondents participated in community activities at least once a month. Approximately 14% participated in community activities every six months. More than 77% of respondents volunteered in activities for their community at least once a month. Thus, about 22% volunteered every six months or less (or never).

Table 5. Participation in Community Activities and Community Services

Community Activities and Volunteerism	f	%
To what extent do you participate in community activities?		
About once a week	78	47.85
About once a month	62	38.04
About once in six months	12	7.36
About once a year	6	3.68
Never	4	2.45
Chose not to answer	1	0.61
To what extent do you participate in volunteer activities in your community?		
About once a week	35	21.47
About once a month	91	55.83
About once in six months	22	13.50
About once a year	10	6.13
Never	4	2.45
Chose not to answer	1	0.61

As displayed in Table 6, participants tended to moderately agree that having a chance to serve made them a stronger part of the community, helping others influenced the way they lived their life, they could make a difference, they will continue to volunteer after high school, community service makes them think about real life in new ways, leaders should be required to serve their community, serving others helps them better understand their community, and they felt a responsibility to serve their community.

Table 6. Descriptive Statistics for Contribution to the Community

Items	N	M	SD
Having a chance to serve makes me a stronger part of my community.	162	5.91	1.07
Helping others has influenced the way I live my life.	163	5.86	1.05
I can make a difference in my community.	163	5.82	1.16
I will continue to volunteer after high school.	162	5.80	1.12
Community service makes me think about real life in new ways.	163	5.77	1.16
A leader should be required to serve his/her community.	162	5.75	1.14
Serving others helps me better understand my community.	163	5.73	1.07
I feel a responsibility to serve my community.	163	5.56	1.24

Note. Overall M = 5.78, SD = .95.

Table 7 displays the analysis of variance for grade level and contributor to the community. No significant differences were found between grade level and contributor to the community $F(5, 157) = .800$, $p > .05$ and represented a small effect size ($\eta 2 = .16$).

Table 7. Analysis of Variance Comparing Contributor to the Community by Grade Level

Contributor to the Community	n	M	SD	F	p
7th grade	27	45.07	4.63	.80	.55
8th grade	28	44.61	8.27		
9th grade	32	47.28	7.05		
10th grade	27	45.11	7.60		
11th grade	22	47.50	7.63		
12th grade	27	47.11	7.60		
Total	163	46.10	7.60		

As noted in Table 8, a significant difference was found between gender and contributor to the community. Females had a higher perceived contribution to their community ($M = 47.33$, $SD = .77$) than males ($M = 44.59$, $SD = .92$). This difference, 2.74, was significant $t(160) = 2.30$, $p = .023$ and represented a medium effect size ($\eta^2 = .35$).

Table 8. Independent Samples t-tests Comparing Contributor Based on Gender

Construct	Gender	n	M	SD	t	p
Contributor to the Community	Male	71	44.59	7.78	2.30	.02*
	Female	91	47.33	7.30		

Note. *$p < .05$. M = Summated scores. Contributor to the Community: Overall M = 46.10, SD = 7.60.

Table 9 displays respondents' sense of community. Overall, participants neither agreed nor disagreed that they had a strong sense of community attachment. Participants tended to agree they had a strong connection to their community, but neither agreed nor disagreed that they have valuable relationships with their neighbors, have many friendships with adults in their neighborhood, adults serve as role models, or relationships with their neighbors helped them to become a better person.

Table 9. Descriptive Statistics for Interpersonal Community Engagement (ICE) Items

Items	N	M	SD
I feel a strong connection to the community where I live.	163	5.17	1.56
I feel my relationships with my neighbors are very valuable.	163	4.90	1.48
I have many places and friends to go to for help in my neighborhood.	163	4.87	1.56
I have many friendships with adults in my neighborhood.	163	4.78	1.60
The adults in my neighborhood serve as role models.	162	4.75	1.52
My relationships with my neighbors have helped me to be a better person.	163	4.63	1.48
I know my neighbors very well on a personal basis.	162	4.57	1.81
Considering the residents in my community, I personally know most of them.	163	4.47	1.67
I communicate with my neighbors at least once a week.	162	4.30	1.69
I do not know many neighbors well. (reverse scored)	162	3.65	1.74
I spend quality time with my neighbors at least once a week.	163	3.64	1.61
I do not feel a strong sense of connection to the community where I live. (reverse scored)	163	2.98	1.70

As displayed in Table 10, no significant differences were found in the analysis of variance comparing interpersonal community engagement based on grade level $F(5, 157) = 1.736$, $p > .05$ and represented a small effect size ($\eta2 = .23$).

Table 10. Analysis of Variance for Grade Level and ICE

Contributor to the Community	n	M	SD	F	p
7th grade	27	53.74	9.00	1.74	.13
8th grade	28	51.82	12.02		
9th grade	32	53.34	10.61		
10th grade	27	54.81	11.02		
11th grade	22	54.59	10.72		
12th grade	27	47.52	10.34		

Note. M = Summated interpersonal community engagement scores. M = 52.60, SD = 10.78.

No significant differences were found in participants' sense of interpersonal community engagement based on grade level (as seen in Table 11).

Table 11. Independent Samples t-tests for Gender and Interpersonal Community Engagement

Gender	n	M	SD	t	p
Male	71	52.76	10.54	.07	.94
Female	91	52.64	10.96		

Note. M = Summated interpersonal community engagement scores. *M* = 52. 60, *SD* = 10.78.

Conclusions, Implications, and Recommendations

A slight majority of the participants in this study lived in rural areas, and an overwhelming majority lived in places of under 50,000 people; most preferred to live on a farm. Most participants reported they engaged in community activities and volunteered at least once a month. Participants felt contributing to their community was important to them and believed it made a positive influence on their life. Most participants also indicated that the community in which they lived and the people closest to them were important parts of their lives and contributed positively to their development. These findings are not consistent with the findings of Pretty et al. (2006); however, these findings are consistent with those of Brennan et al. (2007), who found that 4-H helped engage youth in their local community. An implication exists that youth participating in 4-H who are engaged in their community as youth will be more likely to perform well academically and matriculate to college as Eccles and Barber (1999) indicated.

Youth participants were more likely to be actively engaged in their communities because 4-H programs were well integrated into local communities. This is consistent with the findings of Lerner et al. (2013), who found that 4-Hers were four times more likely to actively contribute to their community than their non-4-H counterparts. This study provides evidence that youth participation in 4-H is related to youth engagement and sense of community. Participants'

connections to their neighborhood and relationships in their neighborhood helped them build a positive sense of community.

4-H activities, such as livestock shows, support healthy relationships among its youth participants, volunteers, and community members. 4-H programs provide opportunities for its youth participants to actively engage in community activities such as volunteering for a local food bank. These 4-H activities and programs help 4-H members build a stronger sense of community. Youth who participated in 4-H and were actively engaged as youth were more likely to volunteer in their communities as adults, and they credited 4-H for their successes (Boleman et al., 2008; Flynn et al., 2010; Merten et al., 2014).

While there appears to be a positive statistical relationship between 4-H participation and community engagement, this study did not explain why that relationship existed or what specific activities conducted through 4-H may have resulted in this relationship. The results indicate that youth were engaged in their community but did not feel a strong sense of community with adults in their territorial communities like their own neighborhood. Future research should explore the relationships with adults in relational communities, like attending church, that may impact community attachment. Future research should also focus on aspects of life in a community (e.g., participation in youth group, 4-H, sports, clubs, student council, etc.) that make youth feel connected. Is it the organizations in which youth participate, the programs and activities in which youth participate, or a combination of both that help youth have a greater sense of community?

This study included only current members of the Texas 4-H Youth Development program. Future studies should be expanded to compare 4-H members and non-4-H members on their sense of community to see what, if any, differences exist. The differences between rural and urban youth should also be explored. We recommend the study be replicated in other states' 4-H programs and other youth development programs such as Big Brothers-Big Sisters, Boy Scouts, Girl Scouts, and Key Club.

References

Boleman, C., Merten, K., & Hall, G. (2008). State 4-H council: A look back on what it meant to serve. *Journal of Extension, 46*(1). https://archives.joe.org/joe/2008february/rb5.php

Boyd, B. L., Herring, D. R., & Briers, G. E. (1992). Developing life skills in youth. *Journal of Extension, 30*(4). https://archives.joe.org/joe/1992winter/a4.php

Brennan, M. A., Barnett, R. V., & Baugh, E. (2007). Youth involvement in community development: Implications and possibilities for Extension. *Journal of Extension, 45*(4). https://archives.joe.org/joe/2007august/a3.php

Bryman, A. (2012). *Social research methods* (4th ed.). Oxford University Press.

Corrigan, M. W. (2004). *An empirical measurement of interpersonal community engagement: Implications to youth communication behaviors and the instructional setting.* [Unpublished doctoral dissertation]. West Virginia University.

Eccles, J. S., & Barber, B. L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? *Journal of Adolescent Research, 14*(1), 10–43. https://doi.org/10.1177/0743558499141003

Ferris, K. A., Oosterhoff, B., & Metzger, A. (2013). Organized activity involvement among rural youth: Gender differences in associations between activity type and developmental outcomes. *Journal of Research in Rural Education, 28*(15), 1–16.

Flynn, A., Frick, M., & Steele, D. (2010). Relationship between participation in 4-H and community leadership in rural Montana. *Journal of Extension, 48*(2). https://archives.joe.org/joe/2010april/rb1.php

Hart Research Associates. (2013). *It takes more than a major: Employer priorities for college learning and student success.* https://www.aacu.org/sites/default/files/files/LEAP/2013_EmployerSurvey.pdf

Hastings, L. J., Barrett, L. A., Barbuto, J. E., Jr., & Bell, L. C. (2011). Developing a paradigm model of youth leadership development and community engagement: A grounded theory. *Journal of Agricultural Education, 52*(1), 19–29. https://doi.org/10.5032/jae.2011.01019

Ladewig, H., & Thomas, J. K. (1987). *Does 4-H make a difference? The 4-H alumni study* (ED282682). ERIC. https://files.eric.ed.gov/fulltext/ED282682.pdf

Lerner, R. M., Lerner, J. V., & Colleagues. (2013). *The positive development of youth: Comprehensive findings from the 4-H study of positive youth development*. National 4-H Council. https://4-h.org/wp-content/uploads/2016/02/4-H-Study-of-Positive-Youth-Development-Full-Report.pdf

McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology, 14*(1), 6–23. https://doi.org/10.1002/1520-6629(198601)14:1<6::AID-JCOP2290140103>3.0.CO;2-I

Merten, K., Locke, D., Williams, M., Carter, M., & Lehman, K. (2014). Impact of 4-H on alumni's community involvement. *Journal of Extension, 52*(5). https://tigerprints.clemson.edu/joe/vol52/iss5/4/

Peterson, D. J. (2016). *Engaging youth, serving community* [Evaluation Report]. https://4-h.org/wp-content/uploads/2016/02/Combined-10-11-12-Report-with-success-stories_Mississippi.pdf

Pretty, G. M., Conroy, C., Dugay, J., Fowler, K., & Williams, D. (1996). Sense of community and its relevance to adolescents of all ages. *Journal of Community Psychology, 24*(4), 365–379. https://doi.org/10.1002/(SICI)1520-6629(199610)24:4<365::AID-JCOP6>3.0.CO;2-T

Radhakrishna, R., & Sinasky, M. (2005). 4-H experiences contributing to leadership and personal development of 4-H alumni. *Journal of Extension, 43*(6). https://archives.joe.org/joe/2005december/rb2.php

Dr. Emily R. Perdue is an assistant professor of agricultural and Extension education in the School of Design and Community Development at West Virginia University. Her primary research interests are youth leadership and community development.

Dr. James R. Lindner is an alumni professor of agricultural education in the Department of Curriculum and Teaching at Auburn University. His research interest focuses on adoption and diffusion theory and evaluation and accountability.

Dr. Gary E. Briers is a professor of agricultural education in the Department of Agricultural Leadership, Education, and Communications at Texas A&M University. His research interests include experiential learning and agriculture-human interactions.