Sense of Belonging as Perceived by Youths Who Continue Participation in 4-H

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Abstract

Sense of belonging is an essential element of a high-quality 4-H program. However, little research exists quantifying sense of belonging among 4-H club members. We measured perceived sense of belonging among Florida 4-H members in middle and high school as well as seven factors that influenced continued participation in 4-H. Parental involvement, 4-H events, and interactions with friends were factors important to participants' continued enrollment. Interaction with a caring adult was the factor most strongly positively correlated with perceived sense of belonging, suggesting the importance to retention of providing a framework that allows a new 4-H member to develop a positive relationship with a caring adult in a safe and inclusive environment.

Keywords: 4-H, belonging, youth development, continued enrollment

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Introduction

Young people who remain enrolled in a quality 4-H program that incorporates the essential elements of 4-H (Kress, 2003) over time develop life skills (Iowa State University Extension and Outreach, 2015), and this continued participation leads to positive youth development (PYD) (Lerner et al., 2014). Even though long-term participation has been shown to be beneficial, many youths leave the 4-H program (Harder, Lamm, Lamm, Rose, & Rask, 2005). In Florida, the largest drop in enrollment occurs among youths who are middle-school aged (Florida 4-H, 2018). Regarding the importance of 4-H from the PYD perspective, adolescents develop assets and competencies through the focused, positive experiences and interactions with caring adults that can occur within youth–adult partnerships in a community-based context (Lerner & Lerner, 2012). Society should provide youth development programs that foster youth–adult partnerships and help young people develop competencies (Lerner & Lerner, 2012). Lerner et al. (2014) used information from their study to make the case that PYD helps promote adolescent thriving and, specifically, that the long-term benefits of participation in 4-H for adolescents prepare youths to contribute as adults.

Four essential elements have been adopted by 4-H: belonging, mastery, generosity, and independence (Kress, 2003). Belonging has been considered the most important essential element (Wagoner, 2010). Not much prior research exists that has quantified a sense of belonging in 4-H settings. Without belonging,

there is no opportunity to engage youths long enough to develop the other elements of mastery, generosity, and independence (Tessman, Gressley, Parrott, & Hall, 2009), and they likely will not remain long enough to experience life skills development or PYD. Newby and Sallee (2011) proposed programs that promote belonging as a solution to retention issues in 4-H. A youth's interactions with adult volunteers in 4-H are also key in the decision to remain enrolled in the program (Albright & Ferrari, 2010).

We undertook a study to measure perceived sense of belonging among middle-school and high-school 4-H club members in Florida, to determine the factors that influenced these youths to continue participation in 4-H, and to explore the relationship between these factors and the youths' perceived sense of belonging.

Proposed Framework

The circumstance of adults working with the same youths over time allows those youths to positively develop life skills. Keeping young people engaged is imperative for long-term impact. Understanding the interactions between the essential elements (Kress, 2003), PYD theory (Lerner et al., 2014), and the 4-H life skills model (Iowa State University Extension and Outreach, 2015) can illuminate why a young person chooses to reenroll in 4-H and, accordingly, develops and thrives over time. To aid in building such an understanding, we developed a framework illustrating a 4-H member's journey from initial enrollment through the decision to reenroll (Figure 1). A young person joins a 4-H club. If this young person experiences the essential elements, youth–adult partnerships are formed and then PYD occurs. The youth who continues also develops life skills and thus feels encouraged to reenroll in 4-H, leading to long-term PYD. In turn, these returning members help new members feel a sense of belonging. Much of the success of the model depicted in Figure 1 depends on youths' feeling a sense of belonging. With our study, we quantitatively measured this piece of the model.

Figure 1.

Conceptual Framework
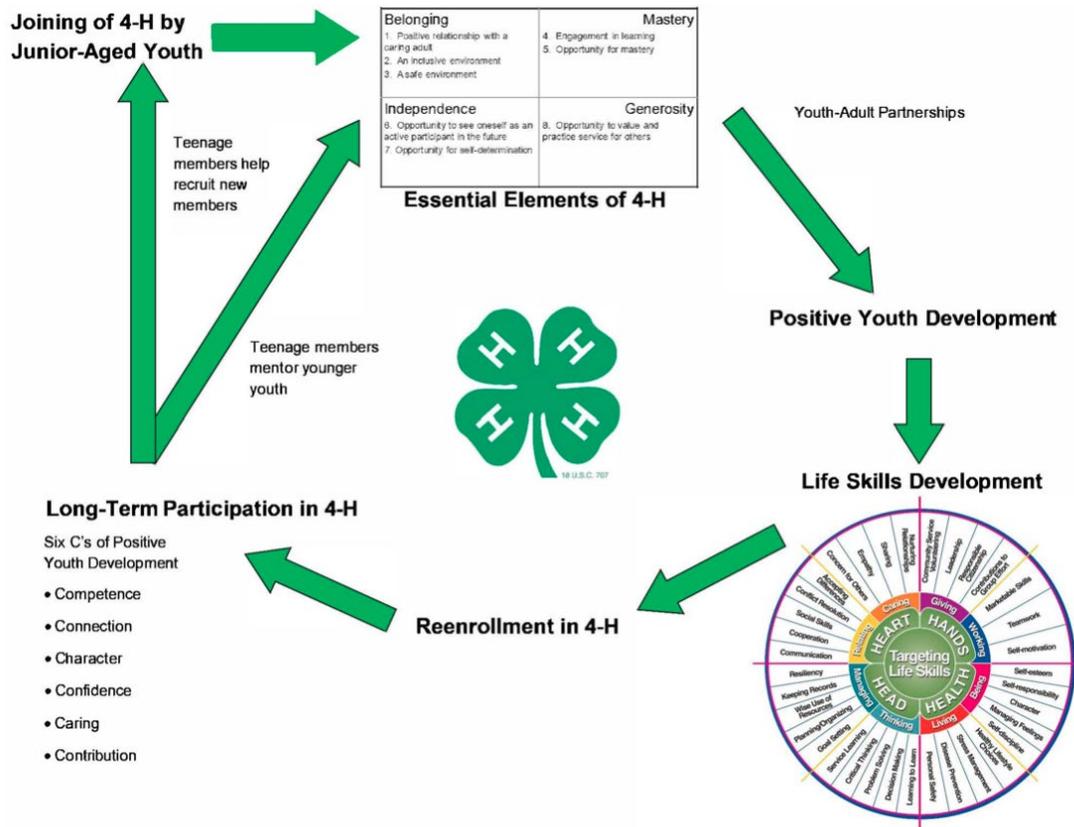
Methodology

Much of the research related to belonging has measured the construct in qualitative terms; with our study, we measured the construct of belonging in 4-H settings quantitatively. We used a descriptive survey research design. The target population was the 5,967 sixth- through 12th-grade members of 4-H community clubs in Florida who reenrolled in the 4-H program in the 2017–2018 year. We communicated with study participants via email.

In 1993, Goodenow developed the Psychological Sense of School Membership Scale (PSSM), an instrument designed to measure students' sense of belonging in schools. The PSSM (a = .88) comprises 18 items, each having a 5-point response scale, intended to measure perceived sense of belonging. The score is determined by adding the scores for the 18 items, for a maximum possible score of 90 (Goodenow, 1993). For our study, we modified the PSSM to fit 4-H members. We substituted *4-H club* for the word *school*, *club members* for the word *students*, and *club leader* for the word *teacher*. Goodenow (1993) considered scores higher than 45 to indicate that students felt that they belonged, with higher scores indicating a stronger sense of belonging. We used this interpretation in our study as well.

To address in some depth why study participants had remained enrolled in 4-H, we added seven additional items (a = .76), each having the same 5-point response scale found in the original PSSM. These statements

were as follows: *My parent/guardian wanted me to remain in 4-H*, *My 4-H projects are why I remain in 4-H*, *4-H activities and events are why I remain in 4-H*, *Participation in 4-H competitive events/competitions is why I remain in 4-H*, *Participation in 4-H camp is why I remain in 4-H*, *Interaction with friends is why I remain in 4-H*, and *Interaction with a caring adult (leader, 4-H agent) is why I remain in 4-H*. These items were approved by a panel of experts with understanding of the essential elements of a quality 4-H program (Kress, 2003). Using Spearman's rank correlations, we explored the relationship between PSSM score and each of the seven items identifying factors influencing the decision to remain in 4-H.

We sent an email to the parents of all 5,967 youths in the population of interest to encourage their child's participation. This email was followed by an email to each youth in the population of interest, with a link to the survey instrument. Up to three follow-up surveys were sent to youths who had not completed the survey (Dillman, Smyth, & Christian, 2014); 473 youths completed the instrument, representing an 8% response rate.

We addressed potential nonresponse error by comparing the results of respondents who completed the instrument in October after the first email to respondents who completed the instrument after the final email on December 15. Both Miller and Smith (1983) and Lindner, Murphy, and Briers (2001) recommended comparing the results of early and late respondents as a tool for addressing nonresponse error, noting that late respondents are generally similar to nonrespondents. We used t tests that compared PSSM scores and scores on each of the seven additional statements for early and late respondents. There were no statistical differences.

Results

In all, 98.4% of the study participants scored above a 45 on the modified PSSM, indicating that these 4-H'ers had a perceived sense of belonging in their clubs. In fact, 21.9% of respondents (f = 104) scored a 90, which is the highest possible score on the PSSM. Table 1 summarizes participant scores on the modified PSSM.

Table 1.

Summary of Participant Scores on Modified Psychological Sense of School Membership Scale

Score	Total number of participants	Number of participants in grades 6–8	Number of participants in grades 9–12	Percentage of all participants
90	104	46	58	22.0
85–89	156	70	86	33.0
80–84	76	34	42	16.1
75–79	54	29	25	11.4
70–74	32	13	19	6.8
65–69	14	8	6	2.9
60–64	12	7	5	2.5
55–59	11	7	4	2.3

50–54	5	4	1	1.0
45–49	2	1	1	0.4
40–44	4	3	1	0.9
35–39	2	0	2	0.5
30–34	1	0	1	0.2
Total	473	222	251	100

Of the 18 items on the modified PSSM, the two statements for which means were highest were the reverse-scored *Adult leaders in my 4-H club are not interested in people like me* (*M* = 4.76, *SD* = 0.79) and the reverse-scored *I wish I were in a different 4-H club* (*M* = 4.75, *SD* = 0.72). The statement with the lowest mean was *Other club members in my 4-H club take my opinion seriously* (*M* = 4.10, *SD* = 1.01). Table 2 shows the mean scores for all items on the modified PSSM, sorted by mean score, as well as the mean total score.

Table 2.

Perceptions Regarding Sense of Belonging Among 4-H Club Members

Item	*M*	*SD*	No.
Adult leaders in my 4-H club are not interested in people like me.[a]	4.76	0.79	465
I wish I were in a different 4-H club.[a]	4.75	0.72	449
I am treated with as much respect as other members in my 4-H club.	4.69	0.70	439
People in my 4-H club are friendly to me.	4.69	0.64	466
Adults in my 4-H club respect me.	4.66	0.69	454
Sometimes I feel as if I don't belong in my 4-H club.[a]	4.65	0.80	463
It is hard for people like me to be accepted in my 4-H club.[a]	4.64	0.84	445
I feel proud to belong to my 4-H club.	4.64	0.80	450
People at my 4-H club know that I can do good work.	4.63	0.70	449
There is at least one adult leader I can talk to in my 4-H club if I have a problem.	4.63	0.90	465
Other members of my 4-H club like me the way that I am.	4.57	0.74	449
I feel like a part of my 4-H club.	4.56	0.83	448
I am included in lots of activities in my 4-H club.	4.53	0.90	438
Most club leaders in my 4-H club take my opinions seriously.	4.45	0.89	460
I can really be myself in my 4-H club.	4.44	0.91	450
People in my 4-H club notice when I am good at something.	4.32	0.92	443
I feel very different from most other members in my 4-H club.[a]	4.28	1.16	439
Other club members in my 4-H club take my opinions seriously.	4.10	1.01	457
Total modified PSSM score	81.99	9.94	441

Note. Scale: 1 = *Not true at all*, 2 = *Slightly true*, 3 = *True about half the time*, 4 =

Of the seven statements added to asses factors influencing participant decision to remain in 4-H, the statement for which the mean was highest was *My parent/guardian wanted me to remain in 4-H* (*M* = 4.46, *SD* = 1.03), followed by the statements *4-H activities and events are why I remain in 4-H* (*M* = 4.04, *SD* = 1.15) and *Interaction with friends is why I remain in 4-H* (*M* = 3.83, *SD* = 1.28). The statement with the lowest mean score was *Participation in 4-H camp is why I remain in 4-H* (*M* = 2.54, *SD* = 1.61). Table 3 shows the mean score for each factor.

Table 3.

Factors Contributing to Continued 4-H Enrollment for All Respondents

Factor	*M*	*SD*	No.
My parent/guardian wanted me to remain in 4-H.	4.46	1.03	429
4-H activities and events are why I remain in 4-H.	4.04	1.15	427
Interaction with friends is why I remain in 4-H.	3.83	1.28	437
Participation in 4-H competitive events/competitions is why I remain in 4-H.	3.72	1.35	439
My 4-H projects are why I remain in 4-H.	3.71	1.37	428
Interaction with a caring adult (leader, 4-H agent) is why I remain in 4-H.	3.40	1.42	439
Participation in 4-H camp is why I remain in 4-H.	2.54	1.61	429

Note. Scale: 1 = *Not true at all*, 2 = *Slightly true*, 3 = *True about half the time*, 4 = *Mostly true*, 5 = *Completely true*.

We explored the relationships between a youth's perceived sense of belonging in a 4-H club and the factors that are important to remaining in 4-H (Table 4). Although all the factors were significantly and positively correlated with sense of belonging, the strongest statistically significant correlation existed between a high sense of belonging and interaction with a caring adult, such as the 4-H club leader or the 4-H agent, $r_s(425)$ = .46, $p < .001$. This represents a medium positive correlation (Lomax & Hahs-Vaughn, 2012).

Table 4.

Correlation Between Factors That Influence Youths' Remaining in 4-H and Their Perceived Sense of Belonging as Measured by Psychological Sense of School Membership Scale (PSSM)

Factor	Correlation with PSSM mean score
Interaction with a caring adult (leader, 4-H agent) is why I remain in 4-H.	.46**
4-H activities and events are why I remain in 4-H.	.41**
Interaction with friends is why I remain in 4-H.	.40**

My 4-H projects are why I remain in 4-H.	.26**
Participation in 4-H competitive events/competitions is why I remain in 4-H.	.23**
Participation in 4-H camp is why I remain in 4-H.	.22**
My parent/guardian wanted me to remain in 4-H.	.22**
**Correlation is significant at the .01 level (2-tailed).	

Discussion

Young people want to be a part of groups. These groups can be formal or informal, and they can have positive or negative influences on their members. Long-term involvement with 4-H should positively influence and develop participants. Data from our study confirm the high perceived sense of belonging among middle- and high-school-aged 4-H members who choose to remain involved in the program. This finding supports the idea that belonging is overwhelmingly regarded as the base on which youth development in 4-H begins (Wagoner, 2010).

It is of interest that the modified PSSM score is significantly positively correlated with all the factors explored in the study. The strongest correlation was between PSSM score and a youth's interaction with a caring adult, such as a 4-H club leader or 4-H agent. This finding supports the literature. Interaction with caring adults is a reason youths continue participation in 4-H (Wagoner, 2010). Conversely, negative interaction with adults is a primary reason youths leave 4-H (Albright & Ferrari, 2010).

Limitations and Directions for Further Research

The study data reported here were from a convenience sample of 4-H members who responded to a survey; therefore, the study is vulnerable to selection bias and sampling error. Also, the high scores on the modified PSSM might make the instrument vulnerable to the ceiling effect. A similar study with a randomized sample of youths who have remained enrolled in 4-H and a randomized sample of youths who have not would be an opportunity for further research.

Implications for 4-H Professionals

We measured perceived sense of belonging in 4-H. Belonging is the cornerstone essential element in 4-H (Wagoner, 2010). Most research reviewed herein addressed sense of belonging in 4-H programs in qualitative terms; we quantified sense of belonging among participants. The PSSM modified for use with 4-H audiences could be beneficial to further research.

The data were clear as to the importance of several factors that help middle- and high-school youths decide to remain involved in 4-H. Interestingly, parental influence was rated highest by participants as influencing the decision to remain enrolled in 4-H. This should be of particular interest to 4-H professionals who may often design marketing efforts for youths but might not market the benefits of participation to parents. The factor rated second highest by participants in our study was that related to 4-H events. Perhaps this is because Florida offers several state-level overnight/weekend events for senior 4-H members. However, Florida offers only county-level programming for junior 4-H'ers. Results from the study indicate that these state-level events are extremely important to keeping 4-H'ers engaged in the program. This understanding

might prove helpful for those in other states planning 4-H programs targeting teenage youths.

It is also of interest that the modified PSSM score is significantly positively correlated with all the factors we explored in the study. The strongest correlation was between PSSM score and a youth's interaction with a caring adult, such as a 4-H club leader or 4-H agent. This relationship with a caring adult is key to helping 4-H members feel as though they belong in 4-H.

Belonging is the cornerstone element on which the other essential elements of 4-H rest (Wagoner, 2010). Our conclusions suggest that it is imperative for youth development professionals and volunteers to have positive interactions and relationships with youths and to create learning environments that are inclusive and safe (Kress, 2003). Such actions will propagate youth–adult partnerships, which should lead to ongoing PYD (Lerner et al., 2014) and life skills development in 4-H participants as they continue in the program. In turn, as members continue in 4-H, they will help create an inclusive environment for new youth participants.

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