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## A Youth Perspective: The 4-H Teen's Leadership Identity Development Journey

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# **A Youth Perspective: The 4-H Teen's Leadership Identity Development Journey**

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*A current focus of youth-serving organizations is youth leadership development with an objective of helping youth become productive contributors to society. 4-H is a leading organization in the effort to expose youth to leadership opportunities. This study examined the leadership identity development of 4-H youth serving in statewide leadership positions. The Leadership Identity Development (LID) model and mentoring mosaic served as the conceptual framework in this study. The purpose of this qualitative study is to shed light on the question, how do 4-H teens describe their journey to leadership? Youth reflected on the experiences, examples, and influences that impacted their leadership journey. The most common response for experiences that led to a 4-H youth's choice to pursue a leadership role was a previous leadership experience. Leadership traits, Extension agents, and historical figures were the most frequently identified examples of leadership, and family members and Extension agents were commonly identified as influences. Four themes emerged from the youth perspectives: (1) leaders are characterized by traits, (2) individual-focused leaders, (3) team-oriented individuals, and (4) community contributors. The results corroborated with Stages 2-4 in the LID model. This study is a starting point for exploring leadership identity development of youth.*

*Keywords:* teen leadership, leadership identity, mentoring mosaic, 4-H

## **Introduction**

4-H is one of the longest-running youth-centered programs in the country (Wessel & Wessel, 1982). Dating back to the early 1900s, 4-H provides a safe and supportive environment for youth to engage in STEM education, civic engagement, and leadership development. 4-H is a youth development organization providing youth with opportunities to gain leadership capacity while

also learning more about themselves. Youth who participate in 4-H leadership programs have demonstrated an increase in leadership skills (Kelsey, 2020; Lerner et al., 2013).

The 4-H Study of Positive Youth Development (PYD) is the first large-scale longitudinal study of 4-H and non-4-H youth. This study revealed that learning from project-work, leadership experiences, and adult mentoring involved in 4-H provides participants with the opportunity for PYD (Lerner et al., 2013). Through this comprehensive study, 4-Hers were shown to be more likely to contribute to their communities, have increased academic achievement, and make healthier choices (Lerner et al., 2013). 4-H has demonstrated the capacity to increase PYD and decrease the likelihood of youth participating in risky behaviors.

Because of these findings and changes in society, youth are being recognized as community resources (Lerner et al., 2003). The response to this has been an increased focus on PYD that aims to increase career-readiness skills. At the core of many of these efforts is leadership with a focus on developing “future” leaders instead of recognizing youth as “current” leaders (Mortensen et al., 2014). To understand how youth can meaningfully contribute to society, we must continue to explore the developmental journey youth take towards discovering their own leadership styles and capacity.

Many studies on youth leadership, particularly regarding 4-H experiences, evaluate the skills demonstrated by youth. A study of State 4-H Council members described their leadership life skills (Bruce et al., 2004). A study of 4-H livestock exhibitors measured the leadership characteristics of youth participating in a state fair contest (Anderson et al., 2015). Radhakrishna and Sinasky (2005) examined the value of 4-H projects and revealed that participation in projects contributed to personal and leadership development. Another study proposed that the challenges and responsibilities experienced through 4-H, such as serving as a camp counselor, contribute to the demonstration of leadership roles (Leff et al., 2015). Kelsey (2020) identified encouragement from important individuals contributed to youth taking on leadership roles.

We know leaders continually evolve and grow in skills and competencies throughout their lifespan (Komives et al., 2005). Additionally, 4-H has been referred to as a pathway for developing leadership skills and experiences (Anderson et al., 2015; Bruce et al., 2004; Kelsey, 2020; Leff et al., 2015; Radhakrishna & Sinasky, 2005). However, little is known about how teens progress into and through leadership positions and the impact of 4-H on that process. The aim of this study is to examine further why teens apply and accept leadership positions in 4-H and explore the leadership development, personal experiences, and influences, which make up their mentoring mosaics, that led them to attain those positions.

## **Literature Review/Conceptual Framework**

PYD concentrates on the development of the “Five Cs”: Competence, Confidence, Caring, Character, and Connection (Lerner et al., 2005). Adolescents who develop the “Five Cs” are said to be thriving (Lerner et al., 2005). Thriving adolescents are able to engage in the sixth “C” or positive contribution to self, family, community, and civil society (Lerner et al., 2003).

With PYD as a guiding framework, the 4-H Citizenship Framework was developed to incorporate civic engagement, service, civic education, and personal development as key focus areas (United States Department of Agriculture [USDA], 2011). Programs that utilize the 4-H Citizenship Framework encourage the development of leadership skills through activities “where youth use their voices, work, ideas or behavior for the greater good” (USDA, 2011, p. 2). By engaging youth in community-oriented programming that provides opportunities for learning and youth-adult partnerships, youth can develop the skills needed to be leaders in the 21<sup>st</sup> century (Larson, 2006; Zarrett & Lerner, 2008). Those skills include self-regulation and self-efficacy, which enable the adolescents to feel confident in their abilities (Gestsdóttir & Lerner, 2007). This developmental process is ongoing and cannot be accomplished through a single program or relationship. Instead, youth develop their leadership identity over time and in stages (Komives et al., 2005).

The conceptual framework for this study is based on the Leadership Identity Development (LID) model (Komives et al., 2006) and the mentoring mosaic framework. The LID model serves as a framework for evaluating the process of evolution, or journey, one’s leadership identity takes over time. Komives et al. (2005) suggested, “students’ changing view of themselves with others influenced their broadening view of leadership and their personal definitions of leadership” (p. 605). The influences that impact an individual are both a culmination of experiences, situations, and people who serve as their mentoring mosaic.

### **Understanding Leadership**

Northouse (2018) defines leadership as “a process whereby an individual influences a group of individuals to achieve a common goal” (p. 5). Over the past century, leadership scholarship has evolved immensely from “great man” theories to traits of leadership in positions to leadership behaviors impacted by an individual’s situation and context (Komives & Johnson, 2009). This has shifted leadership to a process that can be exhibited by all individuals regardless of holding a position (Owen, 2012). Therefore, one’s leadership capacity is based on the process in which they engage to develop their skills and understanding of leadership, with the process being shaped by their characteristics, experiences, and environment.

Today, most approaches involve relationships built upon trust, collaboration, and shared goals (Allen & Cherrey, 2000; Komives et al., 2005). A current process-based perspective is relational leadership, which is a model focused on five components: purposeful, inclusive, empowering,

ethical, and process-oriented (Komives & Johnson, 2009). When individuals engage in relational leadership, they have transitioned from understanding leadership as traits and skills to a lifelong process based on their social interactions and focus on change.

The relational approach also involves an understanding that both emergent and assigned leaders exist. Assigned leaders are those who have a position, status, or title that has appointed them as a leader (Northouse, 2018). An emergent leader is one who takes on an informal role based on the perceptions and relationships they have with others (Northouse, 2018). Individuals with a high-level understanding of the leadership process understand their role as leaders both formally and informally through their social engagement with others. They also recognize that leadership is group-focused and different individuals engage in leadership at different times in group work.

### **Leadership Identity Development Model**

Komives et al. (2005) conducted the first research on leadership identity development with a group of college students heavily involved in organizations. Results indicated that leadership identity is a shifting phenomenon. Komives et al. (2005) confirmed many theorists' observations that leadership identity progresses from a hierarchical, leader-centric view to a collaborative, relational process. Additionally, the youth leadership identity development process is primarily psychosocial in nature but also includes key events. Some emergent aspects of the leadership identity development process included: developing interdependence, establishing healthy interpersonal relationships, increasing confidence, and developing a sense of self (Komives et al., 2005).

Based on the findings, Komives et al. (2006) developed the LID model. The model has six stages: Awareness, Exploration/Engagement, Leader Identified, Leadership Differentiated, Generativity, and Integration/Synthesis. The stages of the model progress from a hierarchical and leader-centric view to a more relational and group-focused view. It is important to acknowledge that these stages are not discrete and can be achieved and revisited in a helix fashion (Komives et al., 2006). *Awareness* (Stage 1) is when individuals are conscious that leaders exist, but leaders remain abstract and afar. For example, the President is a leader (Komives et al., 2009).

*Exploration/Engagement* (Stage 2) is defined by immersion. Immersion takes place primarily within a group, such as a sports team or organization club (Komives et al., 2006). During Stage 2, individuals are learning to engage with others (Komives et al., 2009). In Stage 2, individuals spend more time focused on wanting to be involved as a part of a group or team and less time focusing on those in leadership positions, such as club leaders and team captains. *Leader Identified* (Stage 3) is when positional leaders and their actions are considered the pinnacle of leadership. These assigned leaders are people one knows but are in an elected or delegated position of power. There is a recognition of the hierarchical nature of relationships within a group (Komives et al., 2009).

The shift from Stage 3 to Stage 4 indicates that the individual has moved from a hierarchical to a relational perspective of leadership. In *Leadership Differentiated* (Stage 4), one begins to view leadership as a shared group process, which is not necessarily positional (Komives et al., 2009). Within Stage 4, one begins to understand how individuals take on separate roles and leadership can shift amongst group members. One reaches *Generativity* (Stage 5) when leadership is viewed as commitment and passion towards developing capacity in other individuals and the advancement of community (Komives et al., 2009).

The final stage, *Integration/Synthesis* (Stage 6), is reached when leaders acknowledge the personal capacity needed to lead in diverse contexts (Komives et al., 2009). In Stage 6, individuals can fully recognize leadership as separate from positional roles and a lifelong process. For each of the six stages, Komives et al. (2009) ascribed characteristics of developmental influences, which included stage descriptions, broadening view of leadership, developing self, group influences, developmental influences, and changing view of self with others (Komives et al., 2006). Further research from Wagner (2011) revealed that it can be difficult to discern the difference among Stages 4-6 and cautioned that further research needed to be conducted to explore distinct differences. This could be attributed to the difficulty in measuring later stages of human development (Wagner, 2011).

### **Mentoring Mosaic**

The mentoring mosaic, a network of primary and secondary mentors that serve different roles for each individual to optimize the impact of mentoring (Mullen, 2009), is the conceptual framework underpinned by situated learning theory. To fully comprehend the cognition that occurs during mentoring, it is essential to examine situated learning theory. Situated learning theory emphasizes context and practice as ways for linkages to occur between knowledge, experience, and skill (Choi & Hannafin, 1995). This requires authenticity in tasks, activities, and real problem-solving situations, which is an aim of 4-H leadership development. In situated learning, mentees and mentors must engage in the collaborative construction of knowledge through insightful reflection and discussions of lessons from their previous experiences (Miller, 2002).

According to Miller (2002), there are two forms of mentoring: natural and planned. Natural mentoring can occur through friendship, teaching, coaching, and counseling. Natural mentoring is incidental and occurs throughout one's lifespan (Miller, 2002) and may or may not be recognized by the learner or the teacher. On the other hand, planned mentoring is the result of structured programs with clear objectives. The mentors and mentees are usually matched through a formal process and cooperatively create a contract regarding the nature of the relationship (Miller, 2002). Both types of mentorship have different contexts within one's life and lead to transfer of knowledge. The 4-H Youth Development Program utilizes both natural and planned mentoring; however, when researching the influencers within a 4-H member's leadership journey, one must look beyond these traditional roles and examine their mentoring mosaic.

Bey and Holmes (1992) challenge traditional, isolated mentoring functions and call for the consideration of a comprehensive mentoring role, often referred to as the mentoring mosaic (Browne-Ferrigno & Muth, 2006). This expanded the understanding of the mentoring experience from the role of a primary mentor to one of multiplicity. Multiple mentors create a mentoring mosaic that incorporates a variety of secondary mentors and reflection upon life experiences (Davis, 2016). This enables mentors to serve in a variety of roles throughout one's life.

The mentoring mosaic incorporates "a network of secondary mentors that provide strength of weak times, this can incorporate events, situations, and circumstances of life; books one reads; or crises one face" (Bey & Holmes, 1992, p. 15). This calls for a holistic consideration of mentoring as a culmination of all experiences and relationships, whether natural or planned, that provide guidance and support for the learner. With this in mind, the process of mentoring across the lifespan should take different forms throughout one's life. In adolescence, mentors serve the function of role models, providing the basis for one's cultural development and understanding of the world (Jonson, 2002). When an individual understands how their experiences and influences impact the development of their mentoring mosaic, they can better reflect on how they're developing their primary and secondary networks of mentors. An individual's experiences and influences can all be examined to better interpret what and who one views as their mentoring mosaic.

### **Purpose and Research Questions**

The purpose of this qualitative study is to shed light on the question, how do 4-H teens describe their journey to leadership? In this study, we aimed to explore the mentoring mosaic and LID of 4-Hers through the following research questions:

- 1) How do Virginia 4-H teens describe experiences and influences that led them to attain statewide leadership positions?
- 2) How do Virginia 4-H teens in statewide leadership positions describe their leadership development?

### **Methodology**

This descriptive qualitative study aimed to provide insight on why teens in 4-H assume leadership roles and how they describe their leadership journey. To explore this phenomenon, we examined the leadership development, personal experiences, and influences that have led and impacted one's actions, values, mindset, and responses as a leader. 4-H teen members with leadership roles in Virginia served as the target population. The purposive sample included 4-H teen leaders who were currently serving in statewide leadership positions and were attending a weekend-long leadership symposium. We used purposive sampling, a technique that intentionally seeks out participants/data sources because of certain qualities, to find participants willing to discuss their experiences (Bruce et al., 2004).

Twenty-one ( $n = 21$ ) youth participated in this study. To prevent biasing responses about identity, we did not collect any other demographics from the sample (Fernandez et al., 2016). The participants that attended the 4-H symposium ranged from 14 to 19 years of age and represented a variety of localities throughout the state. Additionally, as indicated on participant enrollment forms, the population was predominantly white and evenly split between male and female.

Data consisted of a one-time open-ended survey (Patton, 2005). We developed a ten-question open-ended survey. We created the survey based on the Leadership Identity Development (LID) model (Komives et al., 2006). The survey included questions regarding the participant's views on leadership in general; their views of themselves as leaders; their experiences, examples, and influences of leadership; and their needs for further development. The ten questions included in the survey were:

1. Describe what a leader is to you.
2. Why do you view yourself as a leader?
3. How do you describe yourself as a leader?
4. How would others describe you as a team member?
5. What experiences have you had that led you to pursue a leadership role in 4-H?
6. Who do you look to as an example of leadership? Why?
7. Who has influenced or supported you to become a leader?
8. As a leader, when things are going right I...
9. As a leader, when things are challenging I...
10. What more do you need to know to be a successful leader?

We administered the survey on the first night of the leadership symposium to prevent participants from responding to questions based on any leadership training provided throughout the symposium. This allowed us to examine the journey experienced by statewide 4-H teen leaders rather than the training they received. We asked participants to answer each question with a minimum of two to three sentences. Before completing the survey, the 4-Hers participated in an hour and a half training on problem-solving styles, had attended school, and traveled from different parts of the state to the meeting site location. Thus, participant fatigue may have impacted the quality of the responses.

We transcribed the open-ended survey responses verbatim from the surveys into Excel. The responses were organized by participant and question, 1-21 for each question, respectively. Three researchers independently open-coded each response (Strauss & Corbin, 1990). Each researcher provided analytical codes and highlighted keywords for each participant's response to each question. Collectively, we grouped like codes together to form consensus on categories through an iterative process (Creswell, 2013). The final number of agreed-upon codes was 12. Each response was then collaboratively recoded based on the new set of codes. This latent

coding process involved multiple coders and points for inter-coder reliability checks (Bernard et al., 2017). We then compiled all codes communally and verbally discussed the reasoning behind each code to aim for consistency and validity. Through this verbal discussion, agreed-upon themes were developed from shared interpretations and codes. Themes were only considered emergent when they were identified through responses to multiple questions from the survey.

In this meaning-making process, we recognized that 4-H members were identifying specific examples, and there was a connection between the 4-Hers' responses and the mentoring mosaic framework. At this time, the researchers decided to examine the data to questions 5, 6, and 7 in a different manner to further explore how respondents described their mentoring mosaics. The data from these questions mainly consisted of lists of individuals and experiences. To explore the data further, the responses for questions 5, 6, and 7 were categorized rather than coded for meaning. The categorized responses were then quantified and transformed into nominal values (Chi, 1997). Participants often provided multiple responses to questions that were put into different categories. For example, a participant may have included their extension agent, a historical figure, and a family member as an example of leadership, which would have resulted in three codes for one individual.

Researcher reflexivity in qualitative research is important to identify. All research team members previously or currently work directly with 4-H youth. We utilized inter-coder checking to reduce individual bias, as our previous experiences varied (Bernard & Ryan, 2010).

## Results

This study aimed to provide insight into the question, how do 4-H teens describe their journey to leadership? There were two guiding research questions: "How do Virginia 4-H teens describe experiences and influences that led them to attain statewide leadership positions?" and "How do Virginia 4-H teens in statewide leadership positions describe their leadership development?"

### **Research Question 1: How do Virginia 4-H teens describe experiences and influences that led them to attain statewide leadership positions?**

To examine the first research question and the 4-Hers' mentoring mosaics, we categorized, quantified, and transformed responses to three questions into nominal values. These three questions asked the 4-Hers to identify experiences that led them to pursue leadership roles, examples of leadership, and influences and supporters on their leadership journey.

**Table 1. Experiences, Examples, and Influences that Led Virginia 4-Hers to Attain Leadership Positions (n = 21)**

Responses	n
<i>What experiences have you had that led you to pursue a leadership role in 4-H?</i>	
Previous leadership roles	6
Previous experiences	5
Experiences with 4-H teen leaders	5
Having the skills of a leader	4
Other (Extension agent, life, natural leader)	4
<i>Who do you look to as an example of leadership?</i>	
Identification of leadership traits	10
Extension agents	6
Historical figures	5
Family members	3
Peers	3
Other (Teacher, coach, political figure)	3
<i>Who has influenced or supported you to become a leader?</i>	
Family members	17
Extension agent	12
Teachers	6
4-H Club Leaders	6
4-H Peers	4
Other (Coaches, political figures, supervisors)	5

*Note.* Participants often had multiple responses to each question.

### **Experiences**

The most common response for experiences that led to a 4-H youth’s choice to pursue a leadership role was a previous leadership experience ( $n = 6$ ). Many of the prior leadership roles were club or local level 4-H positions, but one participant did mention their experiences through school-based organizations. Previous experiences ( $n = 5$ ) encompassed 4-H based experiences, including community service, club projects, and an international experience. Additionally, multiple participants spoke about how comfortable they feel within 4-H, which was also included in previous experiences. One participant stated, “I have really come out of my shell through 4-H. I feel comfortable with 4-Hers, and normally don’t with others upon first meeting.”

When talking about experiences with other 4-H teen leaders ( $n = 5$ ), respondents spoke about wanting to give back to their clubs and communities as previous 4-H members had. One said, “Over the years of being a 4-H member, I have seen the examples that others before me have set. Therefore, I want to work hard to be an exceptional example to others in my club and state.” Others attributed their pursuit to their skills ( $n = 4$ ), including public speaking, being in charge, managing personalities, and understanding others. Two participants felt their Extension agents were the primary reason, while one felt they were a natural leader and therefore should lead.

Participants frequently spoke about leadership as a role or position. Some youth felt they came into their position as a leader from previous experiences and skill development, while others attributed their leadership position to a previous position. One youth pursued a leadership role in 4-H because “I thought it would be good for me due to experiences in scouting.” Another participant stated, “I have gained public speaking skills and become involved in volunteering.” These participants were not specifically stating a role but acknowledging previous experiences that affirmed capabilities to become a leader.

Experience in a different leadership role was often mentioned as the reason they viewed themselves as leaders. A youth remarked, “my club had many openings for small positions, and it led me to where I am now,” while another mentioned, “I have been a Jr. Coach in my local 4-H clubs. I have also been the president of local 4-H clubs that made me want to pursue a leadership role.” Several participants internalized the need for a “leadership role” to be a leader. This was explicitly stated by youth when asked why they view themselves as leaders. One stated, “I have been in what I see as leadership roles.” The other shared, “Because of my success in leadership positions and my traits help me to be a leader.” Both participants identified their leadership roles/positions as the reason for being considered a leader.

### ***Examples***

When asked who they identified as an example of leadership, the participants identified leadership traits ( $n = 10$ ), Extension agents ( $n = 6$ ), and historical figures ( $n = 5$ ) most frequently. Some participants did not identify a specific individual as a leader but instead commented on specific skills or duties the individual needed to perform to be considered a leader and, therefore, their personal example of leadership. For example, one participant commented, “I look for someone who is respected among their followers.” Others provided specific responses with historical figures, including past United States presidents, philosophers, and worldwide leaders. Family members ( $n = 3$ ) encompassed parents, grandparents, and siblings. When participants identified peers ( $n = 3$ ), they either referred to friends or named a specific peer.

### ***Influencers***

When discussing those who have influenced or supported the 4-H youth’s endeavors to become a leader, participants most commonly responded with family members ( $n = 17$ ) and their Extension agents ( $n = 12$ ). Family members included specifically named parents, grandparents, or siblings or the general response of family. 4-H club leaders ( $n = 6$ ) included club advisors, project instructors, and other adults who helped their 4-H club. The majority of the responses were adult figures. However, some of the responses included their 4-H peers ( $n = 4$ ). Two of the participants referred to their 4-H peers as their 4-H family.

## **Research Question 2: How do Virginia 4-H teens in statewide leadership positions describe their leadership development?**

To examine this question, we open-coded the responses and grouped like codes through an iterative process. Through the meaning-making process, four themes emerged: (1) leaders are characterized by traits, (2) individual-focused leaders, (3) team-oriented individuals, and (4) community contributors.

### ***Leaders are Characterized by Traits***

Participants consistently described leaders as having personality and action traits. When asked to describe what a leader is, the characteristics that consistently appeared in the responses included: responsible, flexible, selfless, authentic, idea generators, communicator, dedicated, and inspirational. These words recognized capability or the capacity to demonstrate a skill. Youth participants viewed it as the leader's duty to aid and give of themselves to others. One participant stated, "I view myself as a leader because I help others through troubles. I'm dedicated to what I do, and I want what's best for the group. I believe I guide my peers to success." Here a youth described a leader as someone who can partner with others who are understanding, encouraging, and devoted to their success.

Relationships matter for leaders and the effectiveness of leadership. Participants believed that leaders have a role in preventing or mediating conflict to ensure positive relationships are developed or continued. One teen stated, "I described myself as a leader because I ... can mediate parties into solution." Another said, "They should be fun to be around and easy-going." Both participants acknowledged how leaders work to develop positive relationships. Participants commented on the skills leaders needed to build relationships. One remarked, "A leader is someone who is kind ... and takes the time to listen to others." Another thought, "I feel like a leader is someone who shows respect to everyone." These teens identified the ability and actions of the leader.

When things go wrong or issues arise, there was consistent recognition that a leader analyzes the situation to find a path forward. Participants identified a leader as an individual who could solve problems. For example, "When all goes wrong, people look to one or a group of people to take a stand. They look for someone to get them out of the nasty situation." Another youth specified that a leader is "someone that brings the ideas and opinions of the group together to form the best solutions to a problem." This participant views a leader as the one who is able to facilitate the problem-solving process rather than generate the solution.

### ***Individual-focused Leaders***

Leaders who are individual-focused ensure all members feel included and benefit from membership. Participants commented on the importance of supporting others' success. One

participant stated, “someone who helps take you places in your life.” This statement demonstrates how youth attributed a leader’s influence on an individual’s success. Another participant shared this perspective from their own position as a leader, “I view myself as a leader because I am interested in helping people perform tasks and accomplish goals.” These quotes demonstrate the perspective of leaders having an impact on individuals. Other responses extended more specifically to inclusion and acceptance of diversity.

Individual-focused leaders emerged from an emphasis on making sure individuals felt included and supported by leaders. When describing how others would see them as a leader, one teen said, “includes everyone ... tries to get along with all.” Another said, “A kind person that attempts to include the ideas of all to find a solution ... [for] all.” Both youth emphasized group unity, kindness, and inclusion of ideas. Another, when asked to describe a leader, said “compassionate, inclusive.” Going beyond diverse thought, one youth spoke of previous experiences, sharing - “working with diverse beliefs, cultures, and personalities, allow[s] me to be understanding of others.” Overall, when speaking about inclusion, the participants did not just comment on including others with different backgrounds and ideas within the group.

### ***Team-oriented Individuals***

The team should be at the forefront above individuals with an emphasis on needing to produce results as a team. When leaders felt they were a part of the group, they focused on working to promote the team’s performance without individual recognition. A youth stated, “I am always willing to compromise and take others’ opinions into consideration and put my personal opinions aside.” In this view, leaders put the needs of others ahead of their own. Another felt, “I view myself as a leader because I help others through troubles. I’m dedicated to what I do, and I want what’s best for the group. I believe I guide my peers to success.” Another teen said, “I look for someone who is willing to make sacrifices for the better of the group. They push the group and are dedicated.” These views depict leaders as equal members of the team and the ability of the leader to be fair and make decisions for the overall betterment of the group.

Other youth described leadership as being in charge or directing the team. One participant stated that a leader is “someone who takes responsibility for a group of people and brings them together.” Another said, “A leader is someone who directs ... someone or a group of people.” Both individuals viewed themselves as the director of the group with responsibility for other team members. Youth were not consistent in their views of the role of a leader on a team. Sometimes participants acknowledged being a part of the group, while others felt the leader’s role was to ensure the team performed.

### ***Community Contributors***

“A leader ... think[s] about the majority when making a decision.” This teen discussed the importance of leaders working towards a collective and greater good. The responses indicated

that good leaders help make tangible improvements to ensure that everyone benefits, even those outside the group. Leaders were described as working to make a positive impact. One participant stated a leader “wants to better community.” Another said, “I describe myself as a leader who helps people go in the right direction that suits them as an individual.” This posits collective efforts as beneficial to a specific individual if the individual’s efforts would aid in group advancement.

Another, when asked who they look to as an example of leadership, noted, “I look to [recent political candidate], due to the fact that he brought new ideology to politics for a system that benefits every [every with three underlines] American.” There was congruence between their own personal ideals and the characteristics that they looked to as examples. When asked to describe a leader, one youth believed a leader was “a kind person that attempts to include the ideas of all to find a solution that will appeal and meet the needs of all.” They expect leaders to work toward improvements for society as a whole.

### **Discussion**

This study provides insight into the views of 4-H teen leaders on the experiences, examples, and supporters that contribute to their mentoring mosaics. Many influential individuals have had a significant impact on these teens, which has afforded them the opportunity to gainfully experience leadership from new perspectives (Jonson, 2002) and grow into leadership aspects of who they are (Kelsey & Furhman, 2020). Most responses discussed specific individuals or previous experiences as leaders. Within the mentoring mosaic, this is expected, as mentors and mentees engage around an area of shared interest, allowing them to learn from one another and expand their strengths and qualities. With the teens not indicating many secondary mentors (e.g., books, events, situations, circumstances of life, and crises), they may be placing a stronger emphasis on the behaviors that caring adults, adults in society, and their peers are modeling than on secondary mentor influences as described in the mentoring mosaic.

Responses indicated that participants view leadership from both a positional and trait-approach (Zaccaro, 2007). Family members and Extension agents were viewed as the individuals who provided the most support, acting as a portion of the 4-Her’s mentoring mosaic. Simultaneously, many of the same participants did not identify these individuals as examples of leadership. Therefore, the participants may be viewing leadership from a hierarchical perspective where the leaders are viewed positionally and mainly possess large-scale leadership positions. This would also indicate that teens are identifying those in planned mentoring roles through structured programs rather than identifying those natural mentoring experiences that occur through friendship, coaching, etc. (Miller, 2002).

4-H teen leaders in Virginia attribute prior experiences with leadership as the primary reason for their decision to pursue a statewide leadership position. Most participants spoke solely of other leadership experiences within 4-H. Because study participants frequently spoke of their

leadership experiences within 4-H, this may indicate that participants feel strongly about 4-H's influence on their desire to contribute to their communities. Previous research revealed that 4-H programs contribute to 4-Hers' overall personal development and their likelihood of contributing to their communities (Lerner et al., 2013). Early alumni of the 4-H program report positive influences on their overall development through the program (Anderson et al., 2010). This study illuminates these findings through the experiences described by participants who relayed that 4-H creates an environment where youth are engaging with adults and are helping youth practice leadership skills; thus, youth grow in their leadership identity. Extension professionals and volunteers need to identify roles and responsibilities in long-term 4-H experiences to foster a self-identity of a leader in each member early on and often.

The LID model frames this study from the perspective of why teens assume leadership positions (Komives et al., 2006). The findings indicated perspectives related to developmental phases 2-4 of the LID model. Exploration/Engagement (Stage 2), Leader Identified (Stage 3), and Leadership Differentiated (Stage 4) were all very apparent in the emergent themes. However, very few if any responses indicated Generativity (Stage 5) or Integration/Synthesis (Stage 6). As noted by Wagner (2011), Stages 4-6 may be similar if not one stage, and there may be difficulty measuring differences between these stages as final stages of development. Since the LID model was originally developed with college students, it is not surprising that stages 5 and 6 were not observed. Additionally, the 4-H Teen leaders advanced past Awareness (Stage 1) because they already had taken on leadership positions and viewed themselves as potential leaders. Once a youth has established their initial identity as a leader, adults need to encourage opportunities that highlight leadership concepts reflective of a more holistic understanding of leadership.

Some responses alluded to Exploration/Engagement (Stage 2) by identifying previous experiences that led to pursuing leadership roles and the themes that leadership is characterized by traits and team-oriented individuals. When describing experiences, youth could communicate the experiences they had, which reaffirmed their capabilities to be a leader. Sometimes these experiences were previous leadership roles, but often they were group membership. In Stage 2, individuals identify the skills they need to be successful leaders and prepare for leadership (Komives et al., 2009). The characteristics identified and explanations of how leaders need to engage with others exemplified an understanding of the skills needed. Further, when youth talked about their want to pursue a leadership position, it often came from wanting to be involved and give back. The motivating factors of being involved and giving back can be used to recruit teen leaders and design programming in which teens want to take part.

Komives et al. (2009) view role models, a desire to do more, and motivation as key transition points between Exploration/Engagement (Stage 2) and Leader Identified (Stage 3). When providing examples of leadership, participants explored how role models and iconic examples motivated youth to take on leadership roles of their own. Recall that some youth expressed their want or desire to give back and contribute the same that previous leaders had to younger

members. These statements provided evidence that some participants had already developmentally transitioned to Stage 3. In Leader Identified (Stage 3), leadership is still viewed from a positional and hierarchical standpoint, and leaders are responsible for carrying out tasks (Komives et al., 2009). Many of the participants' responses indicated high positional or assigned views of leadership and saw the leader as the "doer."

The collaborative perspective ventures into Leadership Differentiated (Stage 4; Komives et al., 2006). According to the LID model, Stage 4 attributes leadership as a process, recognizing that leadership can emerge from anyone in the group and not specifically the leader (Komives et al., 2006). In this stage, individuals begin to express confidence in facilitating a sense of community throughout the group.

The themes of team-oriented individuals and community contributors included leaders as those who serve others. Recognizing service as a leadership role was posited in the value of servant leadership and recognized in Stage 4 of the LID Model, Leadership Differentiated, during immersion (Komives et al., 2006). In this stage, the leader's commitment is focused on the group process, and the role of leadership is less important than the act of service (Komives et al., 2006). A youth illustrated this perspective when they shared, "I look for someone who is willing to make sacrifices for the better of the group. They push the group and are dedicated." The youth described leadership in a peer role situated within the group. This leader had a role of moving the group towards high performance and success.

As team-oriented individuals, they understand that leading is not only viewed from an individual perspective but also from a team-oriented perspective in which leaders should interact with other members of the group rather than continuously in a facilitation role. Leading becomes a co-facilitated role, which validates Stage 4 Leadership Differentiated characteristics, suggesting that leaders are emerging and immersing, joining with others in shared tasks (Komives et al., 2005). In addition, leaders are aware that communal, participatory effort is required for success. Leaders tend to be inclusive of others, assisting team members with their overall objective of skill development and goal attainment.

Emphasizing developing positive relationships and exemplifying contribution to community, leaders are influential and guide with respect for others. The leader essentially becomes an identified "role model," suggesting the importance of value among the leader's actions and role (Komives et al., 2005). Leaders thrive to enhance the communities, which they represent. They seek to be inclusive of individual ideas and opinions and to guide a formulated plan in which the greater good is accomplished. Leaders collectively visualize the bigger picture to conquer the greater good (Komives et al., 2005). More pivotal, youth view leadership as an actual position relating that current role to previous experiences. Leaders exemplify respect and responsibility, which validates the LID model perspective of making meaning and possessing influential positive characteristics focusing on vision and value.

It is well established that caring adults in relationships with youth have positive outcomes in the 4-H program (Arnold, 2018). Notably, when identifying examples of leaders, the types of individual participants recognized as influential and providing the most support for participants (e.g., Extension 4-H professional) were not as highly mentioned. The caring adults these youth had the greatest interaction with (e.g., club leaders, parents, and 4-H professionals) were not the people they held up as exemplars of leadership. Not only have individuals impacted these teen leaders, but the many experiences and opportunities that they have been provided from participating in the organization have also provided positive influence. Consequently, prior leadership experiences lead to more leadership experiences and a better understanding of themselves as leaders. It remains of interest that as these youth have started to grow in their understanding of themselves as leaders, they are still not identifying those supporting them (e.g., volunteers and club leaders) as leaders.

A limitation is the purposive sampling method selected. We chose research participants due to their leadership positions in the organization. This purposive sample limits the bounds of inferences we made to a wider population (Bernard & Ryan, 2010). The study did include 4-H teen leaders from two different leadership roles, but because of limited sample size and the study consisting of only one data point, lack of triangulation is a limitation (Breitmayer et al., 1993).

### **Conclusions and Recommendations**

Extension professionals and youth leadership educators alike can gain insight into the stage of leadership identity in which this population of leaders resides. When designing leadership training, professionals should provide youth leaders with further opportunities to explore their leadership identity development and partake in self-reflective processes, which allow teens to gauge their personal progression. These self-reflections should provide youth with the opportunity to explore and practice skills with a more relational and group-focused view of leadership (Komives et al., 2005).

This study also provides insight into 4-H teen leaders' views on the experiences, examples, and supporters that contribute to their mentoring mosaics and becoming leaders. The mentoring mosaic incorporates "a network of secondary mentors that provide strength of weak times, this can incorporate events, situations, and circumstances of life; books one reads; or crises one face" (Bey & Holmes, 1992, p. 15). Many influential individuals have had a significant impact on these teens, which has afforded them the opportunity to gainfully experience leadership entities from a new perspective. Extension and youth development professionals should encourage youth to examine a culmination of all experiences and relationships, both natural and planned (Miller, 2002), as mentoring to further their capacity for building a holistic mentoring mosaic.

Not only have individuals impacted these teen leaders, but experiences and opportunities have also provided positive influences. Teen leaders participating in social/school activities and clubs are often given the opportunity to plan, organize, make decisions, take responsibility, and

perform other basic leadership functions, which increases their ability to effectively perform leadership roles and tasks (Clark & Clark, 1996). These opportunities often lead to the development of various life skills, including increased communication, conflict management, decision-making, responsibility, and leadership (Bean et al., 2017). Future research should explore why youth responded the way they did to achieve more robust results on participants' views on their mentoring mosaic and leadership journey.

It is important to note that leadership is a developmental process across the lifespan (Komives et al., 2009). This study does not illuminate when leadership identity starts, but these statewide 4-H teen leaders recognized that they began to identify their leadership at the club level and before they decided to take on the next steps of leadership. Extension professionals and volunteers can help youth start building self-identification with youth as leaders early. The LID model recognizes that individuals develop their leadership identity.

Due to the age of the population, we did not expect to see the youth much further along in the LID model. However, it is interesting to note that, although some of the responses by statewide 4-H teen leaders were still focused on characteristics, hierarchical perspectives, and were trait-based, many of the participants spoke of group processes. The focus on the view of a leader within the team, whether as the trailblazer or equal, demonstrated a focus on trust, collaboration, and shared goals (Allen & Cherrey, 2000). The model was developed based on college students; despite the population's age difference, these teens are moving away from a hierarchical and leader-centric view towards a more relational and group-focused view, as the LID Model outlines. It may be a valuable line of research to explore if the 4-H club program models a mentoring mosaic, which would raise a stronger awareness of a team-based leadership approach that helps advance the progression into LID.

This study will serve as a starting point for future research on leadership identity development of youth who participate in organized youth programs. It provides a starting place to consider the mentoring mosaic that 4-Hers create. However, future research should consider what experiences and influences teens recognize as a part of their mentoring mosaics. Future research should focus on youth outside of statewide leadership programs. Additionally, a comparative study of 4-H and non-4-H youth leadership identity is necessary to expose how other organized youth programs contribute to youth leadership identity development. Additionally, future research needs to consider triangulating the data to generate more transferable results.

## References

- Allen, K. E., & Cherrey, C. (2000). *Systemic leadership: Enriching the meaning of our work*. University Press.
- Anderson, J., Bruce, J. A., Jones, D. W., & Flowers, J. L. (2015). The impact of livestock exhibition on youth leadership skill development: Youth agricultural organizations. *Journal of Extension*, 53(1), Article 1. <https://tigerprints.clemson.edu/joe/vol53/iss1/1/>

- Arnold, M. E. (2018). From context to outcomes: A thriving model for 4-H youth development programs. *Journal of Human Sciences and Extensions*, 6(1), 141–160. <https://www.jhseonline.com/article/view/653/564>
- Bean, C., Harlow, M., & Kendellen, K. (2017). Strategies for fostering basic psychological needs support in high quality youth leadership programs. *Evaluation and Program Planning*, 61, 76–85. <https://doi.org/10.1016/j.evalprogplan.2016.12.003>
- Bernard, H. R., & Ryan, G. W. (2010). *Analyzing qualitative data: Systematic approaches*. SAGE Publications.
- Bernard, H. R., Wutich, A., & Ryan, G. W. (2017). *Analyzing qualitative data: Systematic approaches* (2nd ed.). SAGE Publications.
- Bey, T. M., & Holmes, C. T. (Eds.). (1992). *Mentoring: Contemporary principles and issues*. Association of Teacher Educators. <https://files.eric.ed.gov/fulltext/ED351327.pdf>
- Breitmayer, B. J., Ayres, L., & Knafl, K. A. (1993). Triangulation in qualitative research: Evaluation of completeness and confirmation purposes. *Image: The Journal of Nursing Scholarship*, 25(3), 237–243. <https://doi.org/10.1111/j.1547-5069.1993.tb00788.x>
- Browne-Ferrigno, T., & Muth, R. (2006). Leadership mentoring and situated learning: Catalysts for principalship readiness and lifelong mentoring. *Mentoring & Tutoring*, 14(3), 275–295. <https://doi.org/10.1080/13611260600635530>
- Bruce, J. A., Boyd, B. L., & Dooley, K. E. (2004). Leadership life skills demonstrated by state 4-H council members. *Journal of Extension*, 42(5). <https://archives.joe.org/joe/2004october/a6.php>
- Chi, M. T. (1997). Quantifying qualitative analyses of verbal data: A practical guide. *The Journal of the Learning Sciences*, 6(3), 271–315. [http://doi.org/10.1207/s15327809jls0603\\_1](http://doi.org/10.1207/s15327809jls0603_1)
- Choi, J-I., & Hannafin, M. (1995). Situated cognition and learning environments: Roles, structures, and implications for design. *Educational Technology Research and Development*, 43(2), 53–69. <https://doi.org/10.1007/BF02300472>
- Clark, K. E., & Clark, M. B. (1996). *Choosing to lead* (2nd ed.). Center for Creative Leadership.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approach*. SAGE Publications.
- Cullingford, C. (2006). *Mentoring in education: An international perspective*. Ashgate.
- Davis, S. A. (2016). “A circular council of people with equal ideas”: The mentoring mosaic in a preservice teacher education program. *Journal of Music Teacher Education*, 26(2), 25–38. <https://doi.org/10.1177/10570837166631387>
- Fernandez, T., Godwin, A., Doyle, J., Verdin, D., Boone, H., Kirn, A., Benson, L., & Potvin, G. (2016, June 26–29). *More comprehensive and inclusive approaches to demographic data collection* [Paper presentation]. American Society for Engineering Education, New Orleans, LA, United States. <https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1059&context=enegs>

- Gestsdóttir, S., & Lerner, R. M. (2007). Intentional self-regulation and positive youth development in early adolescence: Findings from the 4-H Study of Positive Youth Development. *Developmental Psychology*, 43(2), 508–521. <https://doi.org/10.1037/0012-1649.43.2.508>
- Jonson, K. F. (2002). *Being an effective mentor: How to help beginning teachers succeed*. Corwin Press.
- Kelsey, K. D. (2020). The sharpening stone: A phenomenological study of the impact of a 4-H state-level leadership role on youth leadership and life skill development. *Journal of Human Sciences and Extension*, 8(1), 1–16. <https://www.jhseonline.com/article/view/997/800>
- Kelsey, K. D., & Fuhrman, N. E. (2020). Leadership and life skills development among 4-H state-level youth leaders. *Journal of Human Sciences and Extension*, 8(2), 15–27. <https://www.jhseonline.com/article/view/1049/827>
- Komives, S. R., & Johnson, M. (2009). The role of high school experience in college student leadership development. *Educational Considerations*, 37(1), 30–39. <https://doi.org/10.4148/0146-9282.1142>
- Komives, S. R., Longerbeam, S. D., Mainella, F., Osteen, L., Owen, J. E., & Wagner, W. (2009). Leadership identity development: Challenges in applying a developmental model. *Journal of Leadership Education*, 8(1), 11–47. [https://journalofleadershiped.org/wp-content/uploads/2019/02/8\\_1\\_Komives\\_Longerbeam\\_Mainella\\_Osteen\\_Owen\\_Wagner\\_2009.pdf](https://journalofleadershiped.org/wp-content/uploads/2019/02/8_1_Komives_Longerbeam_Mainella_Osteen_Owen_Wagner_2009.pdf)
- Komives, S. R., Longerbeam, S. D., Owen, J. E., Mainella, F. C., & Osteen, L. (2006). A leadership identity development model: Applications from a grounded theory. *Journal of College Student Development*, 47(4), 401–418. <https://doi.org/10.1353/csd.2006.0048>
- Komives, S. R., Owen, J. E., Longerbeam, S. D., Mainella, F. C., & Osteen, L. (2005). Developing a leadership identity: A grounded theory. *Journal of College Student Development*, 46(6), 593–611. <https://doi.org/10.1353/csd.2005.0061>
- Larson, R. (2006). Positive youth development, willful adolescents, and mentoring. *Journal of Community Psychology*, 34(6), 677–689. <https://doi.org/10.1002/jcop.20123>
- Leff, D. M., Retallick, M. S., & Franz, N. K. (2015). Transformative learning and the 4-H camp counselor experience in Minnesota. *Journal of Human Sciences and Extension*, 3(3), 1–17. <https://www.jhseonline.com/article/view/740/641>
- Lerner, R. M., Almerigi, J. B., Theokas, C., & Lerner, J. V. (2005). Positive youth development a view of the issues. *The Journal of Early Adolescence*, 25(1), 10–16. <https://doi.org/10.1177/0272431604273211>
- Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as the basis of personhood and civil society. *Applied Developmental Science*, 7(3), 172–180. [https://doi.org/10.1207/S1532480XADS0703\\_8](https://doi.org/10.1207/S1532480XADS0703_8)

- Lerner, R. M., Lerner, J. V., & Colleagues. (2013). *The positive development of youth: Comprehensive findings from the 4-H Study of Positive Youth Development*. <http://3t61of1t6u3x3af7ir2y91ib.wpengine.netdna-cdn.com/wp-content/uploads/2016/02/4-H-Study-of-Positive-Youth-Development-Full-Report.pdf>
- Miller, A. (2002). *Mentoring students & young people: A handbook of effective practice*. Kogan Page.
- Mortensen, J., Lichty, L., Foster-Fishman, P., Harfst, S., Hockin, S., Warsinske, K., & Abdullah, K. (2014). Leadership through a youth lens: Understanding youth conceptualizations of leadership. *Journal of Community Psychology*, 42(4), 447–462. <https://doi.org/10.1002/jcop.21620>
- Mullen, C. A. (2009). Re-imagining the human dimension of mentoring: A framework for research administration and the academy. *Journal of Research Administration*, 40(1), 10–31. <http://files.eric.ed.gov/fulltext/EJ886783.pdf>
- Northouse, P. G. (2018). *Leadership theory and practice* (8th ed.). SAGE Publications.
- Owen, J. (2012). *Examining the design and delivery of collegiate student leadership development programs: Findings from the Multi-Institutional Study of Leadership (MSLIS), a national report*. Council for the Advancement of Standards in Higher Education. [http://masonleads.onmason.com/files/2012/06/MSL-IS\\_Publication\\_FINAL.pdf](http://masonleads.onmason.com/files/2012/06/MSL-IS_Publication_FINAL.pdf)
- Patton, M. Q. (2005). *Qualitative research*. John Wiley & Sons.
- Radhakrishna, R. B., & 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>
- Shamir, B., & Eilam, G. (2005). “What’s your story?” A life-stories approach to authentic leadership development. *The Leadership Quarterly*, 16(3), 395–417. <https://doi.org/10.1016/j.leaqua.2005.03.005>
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research* (Vol. 15). SAGE Publications.
- United States Department of Agriculture. (2011). *Mission mandates*. USDA. <https://nifa.usda.gov/sites/default/files/resource/4-H%20Mission%20Mandates.pdf>
- Wagner, W. (2011). *Examining developmental stages of leadership for college students: A validation study of the leadership identity development model* [Unpublished doctoral dissertation]. University of Maryland.
- Wessel, T. R., & Wessel, M. (1982). *4-H: An American idea, 1900–1980: A history of 4-H [USA]*. National 4-H Council.
- Zaccaro, S. J. (2007). Trait-based perspectives of leadership. *American Psychologist*, 62(1), 6–16. <https://doi.org/10.1037/0003-066X.62.1.6>
- Zarrett, N., & Lerner, R. M. (2008). Ways to promote the positive development of children and youth. *Child Trends* (#2008–11), 11, 1–5. <https://www.childtrends.org/wp-content/uploads/2014/05/2008-11PositiveYouthDev.pdf>

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