

Developing Active and Engaged Youth Citizens: An Examination of Ethical Factors,
Demographics, and Problem-Solving Disposition

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Dissertation submitted to the faculty of the Virginia Polytechnic Institute and State University in
partial fulfillment of the requirements for the degree of

Doctor of Philosophy
In
Agricultural, Leadership, and Community Education

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May 2, 2018
Blacksburg, VA

Keywords: Citizenship, Youth Development, Problem Solving, Character, Community

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ABSTRACT (Academic)

Thriving youth have the capacity to contribute to greater society and develop independence, mastery, generosity, and a sense of belonging. This development is frequently enhanced through youth programming as ability expansion rather than capacity for authority and community engagement. In Virginia 4-H teen-leadership initiatives infused with positive youth development provide opportunities to bolster active and engaged citizenship (AEC). The purpose of this study was to explain AEC through the examination of ethical factors, demographics, and problem-solving disposition of youth participating in leadership-development programs. This study utilized both person- and variable-centered analyses to develop youth profiles and determine the impact of ethical factors, demographics, and problem-solving disposition on AEC for participants in long-term 4-H teen-leadership programs and short-term 4-H leadership trainings. An ex post facto survey design was used to develop clusters of youth and explain the relationship between problem-solving disposition, demographics, ethical factors, and AEC. The findings indicated that both ethical factors and problem-solving disposition significantly explained AEC for both treatments. Additionally, findings indicated significant differences between clusters for AEC, civic duty, and civic skills. These differences were predominately observed through membership in long-term or short-term leadership programs as well as enrollment in honors/AP courses, gender, ethical views, and problem-solving disposition.

Findings informed the incorporation of community problem-solving in the youth's AEC model. A conceptual model for Youth in Community Problem Solving (YCPS) was developed based on theory and findings. Sociocultural theory and reasoned action approach, situated

within relational developmental systems metatheory, provided a foundation for the YCPS model. Additional literature on positive youth development, youth-leadership development, self-consciousness, sense of community, and problem-solving disposition was utilized in support of the model. Evidence for the inclusion of problem-solving disposition in the model was found through a recent study with youth in leadership programs. If youth are to engage in YCPS partnerships, both youth and adults should be equipped with the necessary tools and resources for equal partnership, so they can overcome power dynamics and inner team conflicts. Additionally, Youth leadership practitioners should consider avenues for infusing character and problem-solving development in gender inclusive program curriculum to increase likelihood for contribution.

ABSTRACT (Public)

Youth are often not viewed as resources for community development. However, when equipped with the right skills, youth are able to contribute meaningfully as citizens. In Virginia 4-H, there are a variety of programs, clubs, and trainings that focus on citizenship and leadership development. Youth leadership programs are often used to prepare youth as future, rather than current, leaders.

Character and problem-solving skills are pathways for increasing citizenship and civic participation. This study sought to examine how character, problem-solving views, and demographics relate to civic engagement of youth. I surveyed 4-H youth participating in year-round teen-leadership programs and camp-counselor or weekend-long leadership trainings.

I found that positive views related to character and problem solving influenced youth citizenship regardless of participation in a year-round or weekend-long leadership program. I also found females in year-round programs and youth enrolled in honors/AP courses were more likely to contribute and engage in their communities. These findings led to the development of a model for engaging youth in community problem solving. This model includes relationships, personal development, leadership development, character, and problem-solving views as important elements for preparing youth to engage with community leaders on community issues.

Youth leadership practitioners and Extension agents should consider ways to include character and problem-solving education in teen-leadership programs in order to prepare youth for community engagement. Further, youth must be provided opportunities for reflection and mentorship in civic engagement and community problem solving. By equipping youth with the tools necessary to participate in their communities, we can increase the diversity of ideas and solutions to community-based problems

Acknowledgements

Completing my doctoral degree was an expedition with beautiful valleys, treacherous mountains, and various backtracking. It was a journey I would not have been able to complete without the support and love from numerous individuals—who deserve a great deal of gratitude. First and foremost are my parents, who have never pushed me towards an end goal, but always provided me with drive and faith to move in the direction of my dreams. My mother once told me, “there are many different ways to change lives.” This simple statement gave me the courage to finish my degree and continue pursuing opportunities to impact others. I will forever be indebted for their selflessness and blessed to be surrounded by their unconditional love.

Thank you to my siblings—Brad, Eric, Crystal, Karl, Emily, and Gina—for continually providing laughter and guidance for my continued perseverance. To little Lonna, thank you for being my inspiration. To Papa Wingard, my angel in heaven, and Godparents, thank you for instilling an unfathomable faith in me. To Melissa for being an A+ editor. To the rest of my family, I am very lucky to have such a large and tight knit support network.

Next, to my academic advisor and mentor, Dr. Rick Rudd, thank you for providing countless life lessons, always asking the right questions, and endless encouragement. I often left your office perplexed at how you guided me to answer my own questions after I entered so lost. Your dedication to your advisee’s growth and success is inspiring. A great deal of thanks also goes out to my committee members. To Dr. Curtis Friedel, thank you for always having an open door and willing to spare a few minutes to answer my questions or more than a few minutes to engage in intellectual discussions. To Dr. Thomas Archibald, thank you for your intellect and insight on providing interdisciplinary and translational explanations for accessibility and

usability. To Dr. Kerry Redican, thank you for always posing questions relating to implementation fidelity and pushing me to consider the clinical side of youth development.

I am also extremely grateful for my wonderful female mentors and friends, Dr. Megan Seibel, Dr. Mary Rodriguez, Dr. Nicole Stedman, and Dr. Charlotte Emerson, who have continually provided an ear, advice, and reassurance throughout this journey. I will always appreciate the professional, personal, and academic advice you've exhumed. A special thanks to Dr. Stedman for encouraging me to pursue this degree and continually reminding me that "you'll be back." To Rosie, Mark, Bubba, and the crew for the opportunity to continue living my dreams and reenergize summer after summer. Without these "intentional" summers, I would have never had the perseverance to continue this journey. To Kacie Carr, for continually calling me Dr. Bush since I decided to pursue this endeavor and never passing "judgements"—we are all who we are.

And there are many others who have entered my life along this journey. First to Adam Cletzer and Kelly Robinson, you continue to remind me everyday that we can all do this. It's important to not just "be awesome today" but every day. To Jeremy Elliott-Engel, we were in this together and will continue to be in our next steps. Thanks for being the perfect travel companion on our many adventures and always reminding me to be more driven. You once said, "you can do anything for a year." I told myself that on day one for three years.

To Jamie Dean, thanks for putting up with me for 2.5 years and always "pretending" to listen. I will always treasure the needed fro-yo runs and not watching ahead on our designated series. To Dami, Helen, Chantel, Arogeanae, and Kathleen, thanks for the comedic relief over the last year. Our office was always a fun environment full of support and "smooth" discussions. To Ryan, Asha, Natalie, Lia, Elli, Stephanie, Michelle, and Lorien, your friendship has meant a

great deal to me and served as the best possible distraction. You reminded me that many distractions are always needed for stress relief. To Ben Grove, Jeremy Johnson, and Dr. Tonya Price for always making me feel valued. You taught me the importance of true collaboration.

A special thanks to Dr. Price and all the Extension Agents who aided in recruitment for this study. This study would not have been possible without your willingness to allow me to attend your meetings and trainings. Finally, to the faculty, staff, students in the Department of Agricultural, Leadership, and Community Education, I am thankful to be a part of this department and to have received endless encouragement and support throughout this experience. I will always appreciate those who stopped by my office to say hello and provide a little pick up after a long work day.

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LIST OF ABBREVIATIONS

AEC	Active and Engaged Citizenship
CVI	Community Viability Indicator Model
CYD	Community Youth Development
DTDM	Dillman Tailored Design Method
EMI	Critical Thinking Disposition Assessment
IRB	Institutional Review Board
PYD	Positive Youth Development
RDS	Relational Developmental Systems Metatheory
VCE	Virginia Cooperative Extension
YCPS	Youth in Community Problem Solving

CHAPTER 1

INTRODUCTION TO THE STUDY

Youth today are constantly met with obstacles and constraints as they progress through developmental stages. Youth are challenged to discover their own identity while facing peer and societal pressures including sexual deviance, self-harm practices, risk-seeking behaviors, and substance abuse (Larson, 2000). The term youth describes the transitional period between childhood and adulthood, typically between the ages of 10 and 24 (UNFPA, 2014). Positive youth development (PYD) and youth-leadership development are strategies for enabling youth to “thrive” (Worker, 2014). “Thriving” youth have the capacity to contribute to the greater society and develop independence, mastery, generosity, and a sense of belonging. This development is frequently enhanced through youth programming as ability expansion rather than capacity for authority and community engagement.

During the 1990s, the focus of youth programming transitioned from delinquency and risk aversion to PYD and promoting resilience (Bean, Harlow, & Kendellen, 2017; Lerner, 2005) with an aim to increase career-readiness skills, including teamwork, communication, leadership, problem solving, self-management, and professionalism to promote success in the workforce (Crawford, Lang, Fink, & Dalton, 2011). This skill growth requires meaningful and engaged experiences, which are still lacking as a focal point in many youth leadership development programs where youth typically gain capacity to be future leaders but are not provided with opportunities to be current leaders or engaged citizens (Redmond & Dolan, 2016; Mortenson et al., 2014).

In youth-leadership literature, conflicting positions on the role of skill development versus community engagement still exist. MacNeil (2006) suggests that youth-leadership literature focuses on providing participants with the ability, skills, knowledge, and talents

required to be successful in the future. Conversely, adult-leadership literature focuses on authority and the development of personal voice, influence, and decision-making power (MacNeil, 2006). The stark contrast in literature identifies a gap in programming, views, and research focused on youth as community resources.

Community youth development aims for personal development while benefiting communities. Perkins, Borden, Keith, Hoppe-Rooney, and Villarruel (2003) define community youth development as:

Purposely creating environments that provide constructive, affirmative, and encouraging relationships that are sustained over time with adults and peers, while concurrently providing an array of opportunities that enable youth to build their competencies and become engaged as partners in their own development as well as the development of communities. (p. 6)

Community organizations often foster this development through the incorporation of community-based principles and positive mentoring with supportive and meaningful relationships with adults (Villarruel, Perkins, Borden, & Keith, 2003). Although this framework includes youth in civic engagement, youth voice, and the role of competence, there is often a gap in the inclusion of youth within community problem-solving efforts.

With community problems increasing in both number and complexity, we must utilize diverse teams to collaborate on viable solutions. By excluding youth from diverse teams, we are missing an untapped source of knowledge and cultural capital; these opportunities are equally beneficial to youth development and their communities (Cargo, Grams, Ottoson, Ward, & Green, 2003). When youth serve collaboratively in equal partnerships with adults, immediate positive impacts arise, such as an increase in self-confidence and self-esteem, an increase in self-worth, a

decrease in powerlessness, a feeling of being taken seriously, an ability to function well in the world, a growing positive self-concept, a decrease in risky/deviant behavior, a decrease in self-destructive actions, and an overall feeling of being loved and/or wanted (Bell, 2003). An emphasis on preparing youth for leadership today rather than tomorrow and engaging youth within their communities is a mutually beneficial objective for both community and youth development.

Research Problem

Community development initiatives rarely build upon the strengths of youth and allow for youth participation in community problem solving. These initiatives should acknowledge that youth have the capacity to contribute to and develop healthier communities with longevity (Checkoway & Gutierrez, 2006). A conceptual framework for YCPS provides an avenue to explore how youth leadership development, community development, and social change can be interwoven to build stronger communities (Barnett & Brennan, 2006). Further, youth leadership training improves self-regulation, self-efficacy, and life skill development, including communication, conflict resolution, decision making, initiative, civic engagement, and negotiation skills (Anderson, Sabatelli, and Trachtenberg, 2007; Bean et al., 2017; Kress, 2006; Reichard et al., 2011), but seldom consider the role of relationships and problem-solving skills in the development of engaged citizens. These programs are often focused on the development of future leaders rather than regarding youth leaders as current leaders and active and engaged citizens. Youth professionals should consider how variation in background factors impacts youth leadership development and, ultimately, their orientation toward citizenship. How do youth become active and engaged citizens?

Purpose and Objectives

The purpose of this study was to explain active and engaged citizenship (AEC) through the examination of ethical factors, demographics, and problem-solving disposition of youth participating in leadership development programs. This study utilized both person- and variable-centered analyses to develop adolescent profiles and determine the impact of ethical factors, demographics, and problem-solving disposition on AEC. Adolescent profiles are identified by utilizing cluster analysis to group youth with similar responses. Findings informed the incorporation of community problem solving in the youth's AECs model. This research addressed the following questions and objectives:

Research Questions

1. What is the impact of ethical factors, demographics, and problem-solving disposition on active and engaged citizenship for youth participating in leadership development programs?
2. Are there youth profiles of active and engaged citizenship based on ethical factors, demographics, and problem-solving disposition for youth participating in leadership development programs?
3. What is a model for incorporating community problem solving in the model for active and engaged citizenship of youth?

Objectives by Manuscript

Manuscript 1: Teen leadership programs as a pathway: The impact of ethical factors, demographics, and problem-solving disposition on active and engaged citizenship.

The purpose of this study was to explain the influence of ethical factors, demographics, and

problem-solving disposition on active and engaged citizenship for youth participating in leadership development programs.

1. Describe the ethical factors, demographics, problem-solving disposition, and active and engaged citizenship results for youth participating in leadership-development programs.
2. Examine the relationship between participants' ethical factors and active and engaged citizenship for youth participating in leadership-development programs.
3. Examine the relationship between participant demographics and active and engaged citizenship for youth participating in leadership-development programs.
4. Examine the relationship between participants' problem-solving disposition and active and engaged citizenship for youth participating in leadership-development programs.
5. Determine if ethical factors, demographics, and problem-solving disposition significantly impact active and engaged citizenship for youth participating in leadership-development programs.

Manuscript 2: Profiles of youth citizenship: Clusters of ethical factors, demographics, and problem-solving disposition. The purpose of this study was to utilize person-centered analysis to develop youth profiles of citizenship. Statistical significance was investigated between clusters and active and engaged citizenship.

1. Describe active and engaged citizenship, ethical factors, demographic characteristics, and problem-solving disposition.
2. Identify clusters of participants based on ethical factors, demographic characteristics, and problem-solving disposition.
3. Examine relationships between active and engaged citizenship and identified clusters based on ethical factors, demographic characteristics, and problem-solving disposition.

Manuscript 3: Creating a model for youth in community problem solving. The purpose of this study was to create a model for youth participation in community problem solving by expanding upon the model for active and engaged citizenship (Lerner, Wang, Champine, Warren, & Erickson, 2014). Through a literary review, this study employed relational developmental systems (RDS) metatheory as a basis for sociocultural theory and reasoned action approach to serve as a foundational base for a conceptual frame for youth's engagement in community problem solving. Further, this study utilized findings on the impact of ethical factors, problem-solving disposition, and demographics and youth profiles for active and engaged citizens to develop a model for youth in community problem solving.

Significance of the Problem

This study contributed to the literature on youth citizenship and community problem solving by increasing the extent of knowledge on the importance of understanding how civic-minded actions manifest within youth. By understanding adolescent profiles for citizenship, youth professionals are able to provide better training and support for youth throughout their personal growth. Understanding the role of problem solving and citizenship provides a robust foundation for developmental programs and adult-peer support. This study provided an opportunity to explore a model for cultivating active and engaged citizens.

This research addressed priorities outlined in the *National Research Agenda: American Association for Agricultural Education's Research Priority Areas for 2016-2020* (Roberts, Harder, & Bradshears, 2016). This study addressed two major research priorities:

- Priority 3: "Sufficient Scientific and Professional Workforce That Addresses the Challenges of the 21st Century" (Roberts et al., 2016, p. 29)
- Priority 6: "Vibrant, Resilient Communities" (Roberts et al., 2016, p. 49)

Priority three calls for a workforce prepared with the skills necessary to be successful (Stripling & Ricketts, 2016). Providing youth with opportunities to become active and engaged members of their communities increases the capacity for young participants and furthers their development of career readiness skills. Youth also contribute to their communities through active and engaged citizenship, which adheres to priority six through human capital development (Graham, Arnold, and Jayaratne, 2016).

Additionally, this research addressed priorities within the *National Leadership Education Research Agenda 2013-2018* (Andenoro et al., 2013). This study addressed two major research priorities:

- Priority 4: “The Sociological Development of the Leader, Learner, & Follower” (Andenoro et al., 2013, p. 16)
- Priority 6: “Social Change & Community Development” (Andenoro et al., 2013, p. 22)

Within this study, youth were examined through a sociological lens by examining the relationship between one’s demographics, problem-solving disposition, and ethical factors, which is a crucial element of priority four. Priority six stresses that leaders should engage in social change and drive change within complex communities. This study aimed to understand more about how youth grow into active and engaged citizens.

Methods

This study was designed to explore developmental trajectories of youth toward AEC. The researcher examined how ethical factors, demographics, and problem-solving disposition impact active and engagement citizenship for youth participants. This study examined how adaptive developmental regulations impact developmental trajectories for AEC through person-centered and variable-centered data analysis.

Research Design

This study utilized a non-experimental, ex post facto survey design (Ary, Sorenson, Irvine, & Walker, 2018). Within this study, all participants received a leadership training treatment, but variation exists among geographical locations and program membership. Limitations with an ex post facto design deal with the amount of possible inferences. Results will be generalizable to participants within teen leadership programs within Virginia Cooperative Extension. Within this study, manipulating the variables would be difficult due to variety of long-term and short-term opportunities to participate in teen-leadership programming throughout the state.

Population

The population within this study was all youth, ages 13 to 19, participating in teen-leadership programs conducted by Virginia Cooperative Extension. Teen-leadership programs in Virginia 4-H aim for youth: to increase and maintain knowledge of self and self-esteem of youth, increase responsibility and the ability to make complex decisions, set goals and develop strategies to reach those goals, become increasingly independent from parents/caregivers, develop strong relationship skills, and increase interpersonal communication skills (Price & Elmer, 2015). There are a variety of short-term and long-term teen-leadership programs within Virginia 4-H. Long-term programs involve youth in year-round clubs with leadership as a focus. Short-term opportunities for teen leadership training include weekend trainings at the state and county levels, which are often focused on training teens to be counselors for summer-camp programs.

Sample

The sampling frame consisted of individuals who were currently registered as participants in year-round and short-term leadership-development programs within Virginia 4-H. The researcher utilized a population sample of year-round leadership programs identified by the Virginia Cooperative Extension state specialist for 4-H Youth Development. The long-term programs were those with an aim to meet the goals set forth by VCE for youth leadership development. The researcher collected a comparison sample from youth involved in camp counselor trainings, short-term leadership-training programs.

Basic Assumptions

The researcher made several assumptions in this study. The researcher assumed tools utilized in the study yielded accurate measurements based on previous research and testing. The researcher also assumed that participants answered all questions honestly and fully. The researcher further assumed that the inclusion criteria for the sampling frame was sound.

Limitations of Study

The researcher took steps to reduce the limitations as much as possible and increase the reliability and validity of this study. However, several limitations still applied. An overarching limitation was the ex post facto design of the study. An ex post facto design is one in which the researcher does not manipulate the treatment, participation 4-H teen-leadership programs or trainings (Ary et al., 2018). The sampling frame, selected based on counties within Virginia Cooperative Extension, was another limitation of the quasi-experimental study. These counties do not all participate equally in teen-leadership programming; therefore, the sampling frame was not equal within each county.

Although recorded and analyzed the researcher had little control over the demographic backgrounds and make-up of the subgroups within districts, which may have impacted overall results and generalizability. Additionally, extension agents within locales are acting as gatekeepers to the youth. It is assumed that the extension agents will choose an unbiased group, but there was a potential for a biased sample, which is not generalizable to the wider population (Ary et al., 2018). Finally, the data was self-reported by youth participants, which could be biased based on memory, exaggeration, and attribution of negative and positive experiences.

Definition of Terms

Active and Engaged Citizenship: An active and engaged citizen possesses a sense of civic duty, has a social connection to their community, feels confident in their ability to enact change in the community, and partakes in civic behaviors (Zaff et al., 2010).

Character: A person's attitudes moral reasoning capacity, attitudes about the welfare of others, behaviors regarding moral principles, interpersonal skills to interact with others in diverse contexts, and commitment to themselves, others, community, and society (Battistish, 2008).

Citizenship: Citizenship is often defined as the ability to commit to the well-being of a larger group or for a larger cause outside of one's individual self-interests (Sherrod, Flanagan, & Youniss, 2002).

Community Youth Development: Community youth development (CYD) concentrates on the development of youth's strengths and competencies. CYD posits ownership of self-development by providing opportunities for youth to develop their competencies within their communities (Perkins et al., 2003).

Ethical Factors: Ethical factors are one's values, attitudes, and behaviors associated with more principles that predict one's likelihood of participating in a specific activity or behavior in the future (Oxford University Press, 2017).

Person-centered Approach: A person-centered approach identifies patterns or clusters of variables in order to reflect subpopulations on the variables examined (Ciarrochi, Morin, Sahdra, Litalien, & Parker, 2017).

Positive Youth Development: Positive youth development (PYD) concentrates on the development of the "Five Cs": Competence, Confidence, Caring, Character, and Caring (Lerner, Almerigi, Theokas, & Lerner, 2005). Adolescents who develop the "Five Cs" are said to thrive.

Problem-solving Disposition: Problem-solving disposition encompasses attitudes, views, and beliefs regarding the problem-solving process and capabilities for participation. Essentially problem-solving disposition relates to an individual's intention to partake in the behavior of problem solving.

Thriving Youth: Youth are said to be thriving when they develop the five "C"s associated with PYD, including: character, competence, caring, connection, and confidence (Alberts et al., 2006). Further, youth must possess positive and healthy connections with their community over time and contribute to self, others, and institutions (Lerner, Brentano, Dowling, & Anderson, 2002).

Variable-centered Approach: A variable-centered approach tests a set of variables against the averages or in the context of considering individuals against the "average" person (Lau & Roeser, 2008). A variable-centered approach provides ways to test hypotheses and to determine differences between individuals (Laursen & Hoff, 2006).

Youth: Youth are individuals transitioning between childhood and adulthood, typically ranging between the ages of 10 and 24 (UNFPA, 2014).

Youth Leadership: “The involvement of youth in responsible, challenging action that meets genuine needs, with opportunities for planning and decision making” (Kress, 2006, p. 51).

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CHAPTER 2

LITERATURE REVIEW

Chapter one included the statement of the problem, research objectives, and basic background information within the study. This chapter provides a more in-depth review of the theories and background literature surrounding the three manuscripts within this study. The chapter is separated into five major sections: (a) community viability; (b) historical perspectives; (c) theoretical foundations; (d) conceptual models; and (e) youth-leadership perspectives.

Community Viability

Viable communities manage change effectively and offer an avenue for members to create a vision for their own futures in the community. A viable community is both sustainable and resilient. Sustainable communities have social, economic, environmental, and institutional stability and longevity (Valentin & Spangenberg, 2000) while a resilient community adapts to unexpected and drastic change (Magis, 2010). The most viable communities are continually growing, changing, and adapting in order to continue progressing while providing a solid foundation for unexpected calamities.

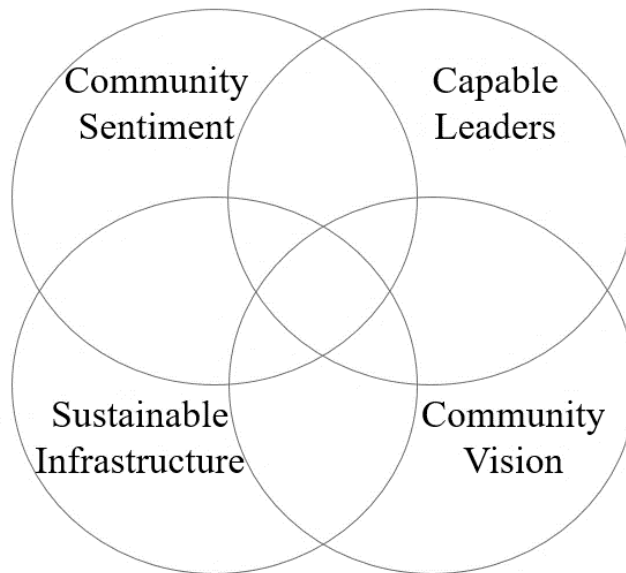


Figure 2-1. Community Viability Indicator (CVI) model developed by Hogg et al. (2016).

As demonstrated in Figure 2-1, the Community Viability Indicator (CVI) model hypothesizes capable leaders, community sentiment, sustainable infrastructure, and community vision as emergent, intertwined constructs that are the basis of viable communities (Hogg, Bush, Rudd, & Seibel, 2016). Community capital's framework (Flora, Flora, & Gasteyer, 2015), diffusion of innovations (Rogers, 2003), and sense of community theory (McMillan & Chavis, 1986) serve as the theoretical foundation for the CVI model. Capable leaders are formal leaders, non-formal leaders, and those with power who motivate and involve others for community advancement (Hogg et al., 2016). Community sentiment encompasses enthusiasm, tradition, volunteerism, heritage, identity, and cultural competency (Hogg et al., 2016). Food access, basic human needs, schools, healthcare accessibility, social services, and job access are all examples of essential aspects of sustainable infrastructure (Hogg et al., 2016). A community vision incorporates goals, investment in the future, and strategic thinking with the capacity to solve problems through a variety of expertise (Hogg et al., 2016). In addition, these constructs have central concepts including power, resilience, sustainability, and the opportunity to lead a meaningful life (Hogg et al., 2016). A general understanding of the interactions of each construct and their implications for the community's overall viability can assist change agents in creation and implementation of community initiatives.

Youth's Role in Community Viability

"Youth have both the awareness and desire to create change" (Mortensen et al., 2014, p. 451). Youth are often provided with opportunities to develop as future leaders and not viewed as community assets. However, active and engaged young citizens can play a significant role in increasing community viability through collaborative problem-solving opportunities (Harris, 2015). Youth participation in the community provides chances for youth to develop decision-

making and leadership skills, provides a representative voice for the communities' future, and drives a sense of belonging (Brennan, 2008). Therefore, youth have the aptitude to influence each part of the CVI model and increase viability within their communities.

When allowed to participate in community problem-solving efforts, youth provide insight for a community's vision and impact the sustainable infrastructure. Brennan (2008) stated "youth bring new ideas, resources, enthusiasm, and serve as the basis for long-term sustainable community development efforts" (p. 56). This type of visioning provides youth the capacity to feel invested and find their places in their communities for the future. When youth share as citizens they have a larger part in altering and understanding norms and values within the community (Barnett & Brennan, 2006), leading to a sense of belonging and community sentiment. For youth to be successful leaders in their communities, they must have opportunities to implement and practice specific skills, including decision-making skills, stress management, prioritizing, delegating, managing conflict, and providing inclusive environments for listening (Barnett & Brennan, 2006). Youth's participation in authentic community action provides the community additional support to drive viability through sustainable and resilient endeavors.

History of Youth Development

Lerner (2005) described three distinct phases within the evolution of youth development initiatives throughout the past century. Phase one is hallmarked by the view of adolescence as a time of storm and stress (Lerner, 2005) where Erikson's (1959) regarded identity formation as a crisis. Society viewed youth as deficit in nature with their developmental time examined through the evolutionary perspective of youth as "beasts" that needed to be civilized to become productive adults (Lerner, 2005).

Around the 1960s, the diversity of developmental and social factors came to the forefront as variables to be examined for their impact on individual youth development (Lerner, 2005). Instead of being viewed as a time of turmoil, scholars began to regard adolescence as a pivotal time for healthy or dysfunctional development. Within phase two, a developmental systems perspective arose, and researchers began to consider ways to prevent problem behaviors by focusing on the strengths of youth as opposed to deficits within their communities (Lerner, 2005). The Carnegie Council on Youth Development (1989) created five goals for thriving youth, including that they enroot to a life of meaningful work and that they be: caring and ethical intellectually reflective, good citizens, and healthy. This perspective led to the emerging field of positive youth development (PYD) in the 1990s and early 2000s and to a focus on developmental research and application which promoted PYD and advanced grand theories (Lerner, 2005). The emergence of PYD is often linked with the fusion of the biological and contextual levels involved in the plasticity of youth developmental processes (Lerner, 2005).

The Field of Positive Youth Development (PYD)

PYD can be defined as:

An intentional, prosocial approach that engages youth within their communities, schools, organizations, peer groups, and families in a manner that is productive and constructive; recognizes, utilizes, and enhances young people's strengths; and promotes positive outcomes for young people by providing opportunities, fostering positive relationships, and furnishing the support needed to build on their leadership strengths (Youth.gov, n.d., para. 2).

Lerner (2005) includes competence, confidence, character, connection, and caring as the Five "C"s youth require to be considered thriving and ultimately partake in the "sixth" C of

contribution. Additionally, programs that promote PYD must include program goals, an atmosphere, and activities that promote development of the five “C”s (Roth & Brooks-Gunn, 2003).

Catalano, Berglund, Ryan, Lonczak, and Hawkins (2002b) postulate that quality PYD programs: promote bonding, foster resilience, promote competencies, foster self-determination, foster spirituality, foster self-efficacy, foster clear and positive identity, foster belief in the future, provide recognition for positive behavior, provide opportunities for prosocial involvement, and foster prosocial norms. Successful PYD programs often include supportive relationships with adults who aim to promote the constructs, promote youth as resources rather than deficits, and create spaces where youth feel safe (Arnold & Cater, 2011). The emergence of PYD yielded exponential growth within research and evaluation, but challenges still exist moving forward. The following challenges have been presented as a path for PYD inquiry:

1. To establish shared definitions of the key constructs of PYD.
2. To document the evidence for the effectiveness of programs that use a PYD approach.
3. To develop a better understanding of why enhancing PYD also prevents problem behaviors (Catalano et al., 2002b, p. 14).

The Fusion of Developmental and Intervention Science

PYD generated the emergence of an interdisciplinary field, which included developmental science and intervention science as well as developmental intervention science (Montgomery et al., 2008). The developmental intervention science approach is one “committed to the use of both descriptive and explanatory knowledge about changes within human systems that occur across the life span in the development, implementation, and evaluation of evidence-based multidisciplinary life-span intervention strategies” (Kurtines et al., 2008, p. 237). This

fusion shifted the focus to longitudinal intervention strategies, which provide short-term and long-term impacts on the lives of youth (Arango, Kurtines, Montgomery, & Ritchie, 2008). Catalano, Hawkins, Berglund, Pollard, and Arthur (2002c) postulate that the fusion of intervention and developmental science is the most successful strategy for altering risks and protective factors through multiple domains.

Lerner (2005) further expanded the theoretical foundations of PYD to include developmental systems theory. Developmental systems theory features: a relational metatheory, the integration of levels of organization, developmental regulation across ontogeny, integrated actions, plasticity in development, relative plasticity, intraindividual change, optimism, and is multidisciplinary (Lerner, 2005). This framework allows researchers to examine attributes, individuals, contexts, historical underpinnings, and instances of development (Lerner, 2005). Research studies are built upon considerations made outside the general outcomes in relation to participants and to the further development of comprehensive theoretical models that examine both risk and protective factors in relation to developmental and contextual factors (Youngblade et al., 2007).

Historical Development of Youth Inquiry

The trajectory of youth development research and evaluation followed the course of youth development in practice. Over the past 20 years, the field of inquiry shifted to examine comprehensive strategies and development as opposed to focusing on single issue-based outcomes (Barcelona & Quinn, 2011). Researchers conducted several meta-analyses: to examine this historical shift, shed light on current trends, and call attention to the need for a shift in perspectives for further development.

In 2002, Catalano, Berglund, Ryan, Lonczak, and Hawkins (2002a) examined PYD outcomes through a meta-analysis of published research and an evaluation of programs involving PYD constructs. In order to be included in this study, empirical research had to include an experimental design or a quasi-experimental design with a structured comparison group and behavioral outcomes (Catalano et al., 2002a). This inclusion criterion is based on rigorous experimental designs deemed the “gold standard” in youth-development research. Often quasi-experimental designs, which are instituted without randomization but with direct comparison groups, are considered acceptable within this gold standard as demonstrated in Catalano et al.’s (2002a) meta-analysis of quality PYD research. The gold standard requires rigorous statistical reporting, attrition issues, sample size, sample power, and defined units of analysis versus the unit of assignment. It is important to note the criterion could have left out rigorous and sound research studies from this meta-analysis. However, this study yielded some important concerns for the state of evaluation within PYD, including a low number of follow-up studies, lack of common measures, comprehensiveness of information within publications, and use of proven methods (Catalano et al., 2002a). Catalano et al. (2002b) also identified utilizing identified predictors of problem behaviors as interpreters and focus on strengths-based development as a turning point in the field.

Barcelona and Quinn (2011) expanded their meta-analysis to include articles published in top-tier journals regardless of research design. The findings revealed that the majority of published articles utilized traditional quantitative data with approximately one-third of the 462 articles including qualitative or mixed method techniques (Barcelona & Quinn, 2011). This study had several notable findings, including a lack of strengths-based approaches and consideration for the processes for developing positive outcomes, understudied transitional times, majority

inclusion of both boys and girls, inclusion of parental or influential-adult perspectives in a small number of articles, a lack of consideration for contextual factors, and the quantitative nature of most studies. An expanded body of literature and research is essential for moving the field of PYD forward.

Evaluation expanded in recent years from solely measuring program outcomes to “setting the stage for broader, more inclusive, evaluation strategies; strategies that emphasize evaluation use and organizational learning, both of which have been highlighted as important if evaluations are to have impact on stakeholder support, program improvement, and decision making” (Arnold & Cater, 2011, p. 1-2). The origins of youth program evaluations counted the number of participants in a program followed by examining participant satisfaction as the sole method for evaluation and support for continued funding (Arnold & Cater, 2011). In 1992, the Carnegie Council on Youth Development stated that there was a scarcity of expertise for quality evaluation and a lack of variety in evaluation approaches. This placed a higher emphasis on capacity building within programs and identified quality as essential for program success (Arnold & Cater, 2011).

Recently, youth development inquiry shifted to incorporate a person-centered approach over a variable-centered approach. A variable-centered approach examines isolated variables within cross-sectional or experimental models (Benson, Scales, Hamilton, & Sesma, 2006). Within person-centered models there is a higher “focus on patterns or clusters of variables, use of longitudinal samples, and dynamic nonlinear theory and analytic strategies” (Benson et al., 2006, p. 915). Benson et al. (2006) concluded that knowledge is relatively developmental for factors correlated with beneficial outcomes, cross-sectional relationships with social norms and positive outcomes, and short-term benefits to youth behaviors. However, there is still a demand to learn

more about the interconnections and relationships between risks factors and positive outcomes (Benson et al., 2006). The results yielded the development of seven hypotheses for further examination:

1. Contextual change hypothesis: Contextual variations can impact an individual, and a change in context can benefit positive development.
2. Youth action hypothesis: Youth can take actions to benefit their personal ecological surroundings; those actions can have cumulative impacts, and youth participation can strengthen that impact.
3. Covariation hypothesis: Individual attributes and contextual factors are mutually reinforcing and impact one another.
4. “Pile-up” hypothesis: The amount of positive influences and experiences relate to the amount of positive and/or negative results.
5. Longitudinal hypothesis: Indicators of change and development are achieved over time.
6. Community hypothesis: Community plays a part in contextual development of youth and impacts overall viability.
7. Universality/Diversity hypothesis: There are strategies and techniques for providing support and opportunities to develop thriving youth (Benson et al., 2006).

Further research should be conducted to explore these hypotheses and further develop the understanding of youth development and the growth of thriving youth.

New Directions for Youth Inquiry

Researchers have been examining youth for over a century, but PYD and developmental prevention science are relatively new fields emerging about 30 years ago. In recent years, a shift

to a more inclusive variety of research expanded the body of literature on youth development, and person-centered approaches have become the pinnacle of research by focusing on the development of a whole person with regard to their environment and individual characteristics. Recent implementation of new techniques, tools, and methods, including new instruments, integrative data analysis, relational developmental systems, and relational data analysis, advanced the knowledge base. Researchers are also exploring the roles of both youth educators and youth within inquiry. When discussing methods for moving the field of PYD research and evaluation forward, it is essential to consider the benefits of quality methods and varied techniques to further the body of knowledge.

Person-centered approach vs. variable approach. Historically, variable-centered methods comprise the bulk of literature available on youth development. This approach segregates variables to examine relationships among sets of independent and dependent variables (Benson et al., 2006). A person-centered approach identifies patterns or clusters of variables in order to reflect subpopulations on the variables examined (Ciarrochi, Morin, Sahdra, Litalien, & Parker, 2017). Put simply, “instead of analyzing means, variances and covariances of scale scores as in the common variable-centered approach, the person-centered approach analyzes persons or objects grouped according to their characteristic patterns” (Stemmler, 2014, p. 1). Although person-centered analysis was not derived from Rogers (1979) perspective on therapy treatments, there are similarities between the approaches. Rogers (1979) viewed individuals as possessing vast resources for their own advancement and development. However, the potential for retrieving one’s psychological attitudes is dictated by environment and climate (Rogers, 1979). This view presents the contemplation of the “whole” person in relation to one’s environment among personal factors. This holistic perspective allows for progress through the

consideration of intraindividual change and the interactions of protective and risk factors (Bates, 2000).

In a variable-centered approach, a set of variables are tested against the averages or in the context of considering youth against the “average” person (Lau & Roeser, 2008). Studies utilizing these techniques are successful in determining the interrelationships between variables and measuring how these interrelationships influence behavior or impact defined outcomes (Bates, 2000). A variable-centered approach provides ways to test hypotheses and to determine differences between individuals (Bates, 2000; Laursen & Hoff, 2006). However, by investigating individual variances based solely on outcomes with time specific measurements, researchers fail to view change over time and to identify how different groupings of individuals may vary over time (Bates, 2000). Variable-centered approaches seldom provide consideration for a variety of risk or environmental factors that occur throughout different developmental periods (Bates, 2000).

A person-centered approach can take multiple forms and is not an all-inclusive statistical method, but it does provide further consideration for intraindividual change and the diverse pathways of development. “The person-centered approach is grounded in systems perspective of holistic organization of interactive factors and is particularly suited to studying the complex organization of multiple characteristics within the individual” (Lau & Roeser, 2008, p. 497). A person-centered approach is often referred to as a pattern or process-centered approach which examines how clusters of variables impact behavioral responses (Bates, 2000). Additionally, person-centered approaches view the population as a heterogeneous group who are influenced by different variables to a diverse extent at various points in time (Laursen & Hoff, 2006). There are a variety of techniques for conducting person-centered analyses, including heuristic cluster

analytic techniques, model-based clustering methods, latent class analysis, semiparametric group-based modeling, and configural frequency analysis (Bauer & Shanahan, 2007; Hill, White, Chung, Hawkins, & Catalano, 2000; Stemmler, 2014). These techniques all have the same goal: to examine how person and context factors interact at the individual level; all techniques achieve this goal through approaches that are more appropriate for use with the research design.

Person-centered approaches have the capacity to incorporate an RDS approach, which involves examining the process in which one becomes themselves through an accumulation of their past, present, and future (Lerner, 2015). RDS metatheory postulates that individuals interact within their contexts differently and that there are mutual relationships between one's context and individual. RDS provide contextual applications of person-centered approaches by investigating trajectories of development (Bates, 2000). For example, by identifying clustered groups of individuals that appear to be relatively homogenous in relation to defined behaviors, the clusters can then be utilized to examine specific variables or predictors for different trajectories (Bates, 2000). The results could yield valuable data and insight into the vast differences of heterogeneous groups over time.

Theoretical Foundation

Relational developmental systems (RDS) metatheory regards youth as resources (Geldhof, Bower, & Lerner, 2013). Within RDS, examining trajectories toward civic engagement and community problem solving, increases the understanding of the mutually-influential person-context relationships (Zaff et al., 2011). The theoretical foundation for this study included both sociocultural theory and reasoned action approach, which are situated within RDS metatheory. In addition, PYD and community youth development frameworks are incorporated to set a foundation for a deeper understanding of how youth become thriving citizens.

Relational Developmental Systems

An RDS approach examines the process of how one becomes themselves through an accumulation of their past, present, and future (Lerner, 2015). RDS postulates that individuals interact within their contexts differently and there are mutual relationships between one's context and the individual. For example, a child's school environment impacts the child. However, the school environment is also impacted by the presence of the child. This theory emerged through developmental science, as researchers continued to examine mutually-influential relationships between individual contributions, community engagement, and community organizations (Lerner, Wang, Champine, Warren, & Erickson, 2014).

RDS metatheory is "a life-span approach to the scientific study of systematic intraindividual changes—from conception to the end of life—of an organism's behavior, and of the systems and processes involved in those changes and that behavior" (Overton, 2015, p. 47). Under this premise, inter- and intra-individual change occurs through reciprocal bi-directional or circular relationships between an individual and their context (Overton, 2013). A key element within RDS is plasticity: the concept that living organisms are inherently active, self-creating, self-organizing, and self-regulating with development being systematic and continuous rather than random in nature (Lerner & Overton, 2008; Overton, 2015), which means that the development of an organism is nonlinear and complex within its physical and sociocultural context.

Within RDS, adaption involves the system's response to change within the context (Overton, 2013). Developmental processes are non-ergodic (Lerner et al., 2014). Homogeneity does not occur throughout samples and is not stationary over time. Therefore, development is optimized when individual strengths and environmental assets are capitalized upon for positive

growth (Geldhof et al., 2013). Within empirical research, scholars aim to answer “what” questions to yield holistic and inclusive findings that promote human development and social justice (Lerner & Overton, 2008). For example, what features of active and engaged citizenship (AEC) can be reached, and through what contexts, youths, and developmental periods?

Further, RDS assimilates six defining features: (1) organization of processes; (2) embodiment; (3) order and sequence; (4) direction; (5) epigenesis and emergence; and (6) relative permanence and irreversibility (Overton, 2015). Organization of processes involves biological, sociocultural, and physical environmental subsystems (Overton, 2015). Embodiment incorporates how one’s body interacts with their physical and sociocultural surroundings to produce lived experiences. Universal sequence exists within the living system, but order and sequence are subject to chance (Overton, 2015). Direction involves a unidirectionality toward growth through normative sequence, allowing for multiple paths toward growth. The system is situated within a specific context through epigenesis with emerging system novelty for an increase in complexity. Transformational change results in relatively permanent and irreversible alterations to one’s developmental trajectory (Overton, 2015).

Within RDS metatheory, one’s developmental trajectory is separate and independent from others. All individuals engage in actions and behaviors—intentional activities, whether conscious or subconscious—resulting in the dependence of all actions and behaviors upon person, culture, and biology (Overton, 2013). Adaptive developmental regulations emerge and can be advanced to increase the likelihood of positive development. Within the model for AEC of youth (Figure 2-2), “adaptive developmental regulations lead to PYD and, within the context of the broader ecology of human development, in turn lead to positive civic engagement and reduced risk and problem behaviors” (Lerner et al., 2014, p. 73). Trajectories can be examined to

predict developmental processes based on the inclusion of adaptive developmental regulations. With attention to biological, physical, and sociocultural subsystems, probabilities can be examined through normative sequences with various action paths within RDS metatheory.

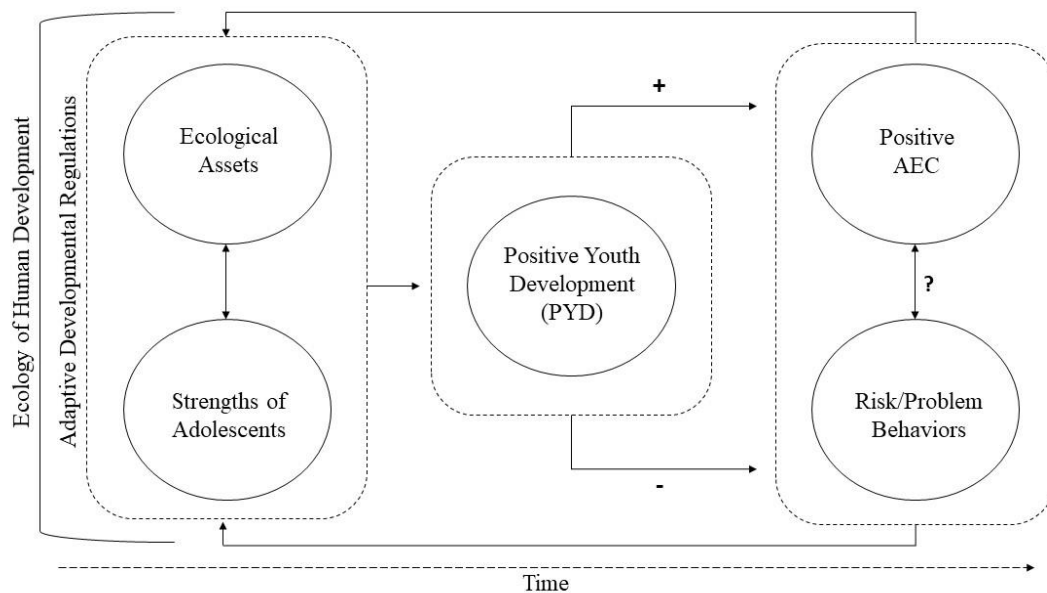


Figure 2-2. Adapted from Lerner et al.'s (2014) model for active and engaged citizenship of youth.

Sociocultural Theory

Biology, person, and culture have bidirectional, reciprocal relations based on RDS metatheory (Overton, 2015).

In the area of sociocultural development, there appears to be a clear trend away from positions that identify individual development and culture as separate and distinct, if interacting, entities, and towards the position that recognizes their coconstruction, codetermination and codevelopment (p. 94).

Sociocultural theory adds another element to examine the influence of culture and context on one's development.

Social-cultural theory emerged from social cognitive theory. Social cognitive theory is centralized around the idea that behavior is dynamic in nature, with both personal and contextual factors simultaneously stimulating both one another and the individual's behavior (Holtzapple et al., 2011). Personal and environmental factors, observations, and previous experiences drive an individual's prediction and knowledge of a specific behavior, leading to an intended outcome (Holtzapple et al., 2011). Stajkovic and Luthans (2003) hypothesize that all individuals engage in vicarious learning, self-regulation, symbolizing, forethought, and self-reflection to develop this knowledge and personal agency. Personal agency refers to an individual's ability to perform a behavior for an explicit purpose (Bandura, 2001). These behaviors often predict future actions, including civic engagement.

Based on behavior derived from personal and contextual factors, sociocultural theory speculates that individuals derive meaning from their experiences based on culture and history (Vygotsky, 1978). Namely, social interaction, through development, impacts one's culture, developmental trajectory, and symbolism (Mahn, 1999). Three central themes of sociocultural theory are: social sources of individual development, semiotic mediation in development, and genetic analysis (John-Steiner & Mahn, 1996). Learning is a combination of genetics, symbols, and social interactions, which results in cultural association (Mercer & Howe, 2012).

In the meaning making process of an individual's development, cultural association and symbolism influence learned positive behavior. As described by Steege and Sullivan (2009), learned positive behavior is the result of the behavioral application of moral ideals developed through culture and history. Moral and ethical standards are learned over time through continued engagement in behavioral maintenance (Steege & Sullivan, 2009). Behavioral maintenance

culminates in the implementation and adaptation of an individual's behavior in diverse contexts and environments (Steege & Sullivan, 2009).

When developing citizenship orientation and engaging in community problem-solving efforts, one's culture and history of social experiences have impact on developmental trajectories. Youth are not homogeneous citizens; they have different lived experiences of citizenship (Bogard & Sherrod, 2008). Parental and community views of civic participation and one's self-efficacy relating to participation in problem-solving opportunities both impact youth in diverse ways and should be taken into consideration. Taylor and Marri (2012) found that identity, family, movement, school curricula, and community engagement all impact immigrant youth's conceptualization of citizenship. These factors varied in their impact on developmental pathways toward engaged citizens (Taylor & Marri, 2012). This is important to consider when envisioning an optimized developmental process to contribute to active and engaged citizens.

Reasoned Action Approach

Similar to sociocultural theory, reasoned action approach emerged from Bandura's (1971) social cognitive theory. The reasoned action approach predicts how individuals choose to engage in behaviors and also incorporates a framework for examining how background factors impact beliefs that influence an individual's attitudes, perceived norms, and perceived behavioral control. Attitudes, perceived norms, and perceived behavioral control culminate in intention, which drives behavior (Figure 2-3) (Fishbein & Ajzen, 2010).

Within reasoned action approach, there are three distinct types of beliefs: behavioral, normative, and control (Fishbein & Ajzen, 2010). Behavioral beliefs are contrived from predictions of benefits and consequences from engaging in a behavior that translate into a person's attitude towards the behavior (Fishbein & Ajzen, 2010). Normative beliefs are developed through

perceptions and are based on social pressures and social responses of what others' judgement will be of the behavior (Fishbein & Ajzen, 2010). Normative beliefs impact the development of perceived norms. Control beliefs include contextual and personal factors that inhibit or assist an individual's capacity to perform the behavior (Fishbein & Ajzen, 2010). Control beliefs relate to perceived behavioral control.

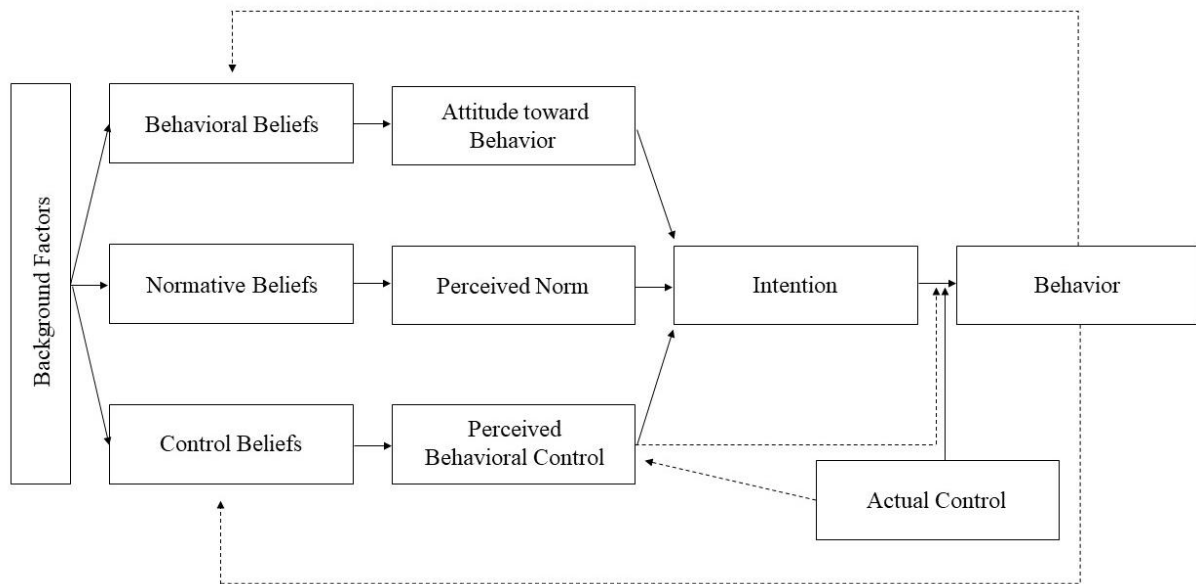


Figure 2-3. Adapted from Fishbein & Ajzen's (2010) reasoned action approach model.

Intention—the readiness to perform the behavior based on the person's attitudes—along with perceived norms and perceived behavioral control are the best predictors of one's likelihood to partake in a behavior (Fishbein & Ajzen, 2010). Intentions are developed over time based on an individual's actual control or their skills, abilities, and environmental factors. Background factors including sociocultural, demographic, and other variables contribute to beliefs and impact engagement within the behavior (Fishbein & Ajzen, 2010).

Active and Engaged Citizenship

Sherrod, Flanagan, and Youniss (2002) define citizenship as “the ability to move beyond one's individual self-interest and to be committed to the well-being of some larger group of

which one is a member” (p. 265). Larson (2000) postulates that civic engagement requires an initiative for deeper participation and intrinsic motivation to achieve common goals. Further, an active and engaged citizen must feel a sense of civic duty and a confidence in their abilities to affect change within their community (Zaff, Boyd, Li, Lerner, & Lerner, 2010). Individuals are not able to engage in their communities unless they feel a sense of belonging and a commitment to improving their community. Therefore, AEC includes behavior, cognitive, and socioemotional constructs (Zaff et al., 2010).

Within the United States, citizenship and civic engagement have long been the backbone of community progress. The longest running citizenship orientation is dutiful citizenship (Bennett, Wells, & Freelon, 2011). The concept of dutiful citizenship dates back to the late 1800s to the early 1900s during the progressive era and is based on participation in organized groups and public life prompted by a sense of personal duty to make their community a better place to live (Bennett et al., 2011). Dutiful citizenship often takes the form of authentic participation that involves active contribution in dialogue and deliberation for community decision making (Callahan, 2007). Younger generations today have transitioned away from this type of participation and toward civic trends of more cause-oriented political endeavors, including protests both on and offline (Bennett et al., 2011), likely the result of a lack of connection and sense of belonging within one’s community. However, youth who are active in online citizenship forums often have civic orientations similar to those of their parents who are often engaged in authentic participation.

It is essential to consider how to cultivate civic orientations and provide youth with opportunities to engage with their communities. An obstacle of engaged citizenship is a form of oppression all youth experience called ageism or “adultism” (MacNeil, 2006). Under loco

parentis, adultism is a universal requirement for children to respond to adults as authority figures that stems from the factor of power (Teitelbaum, 1981). Youth often have difficulty seeing themselves as equal decision makers or problem solvers within adult partnerships. Adultism exists based on adult-centric perspectives that view young people as inferior to adults (Bell, 2003), often leading to viewing youth as problems rather than resources. LeFrançois (2014) stated “research has been biased by adult interest and adult-centered understanding of children and childhood, producing a body of knowledge that merely represents adult constructions of childhood” (p. 48). From this perspective, it is essential to consider contextual factors and uphold diligence to understanding youth perspectives.

Community Problem Solving

Youth have the capacity to contribute meaningfully to their community, which is mutually beneficial for the youth participants and the community (Redmond & Dolan, 2016). When youth are treated as current leaders rather than the leaders of tomorrow, they are able to contribute toward solving problems. In order to engage as active citizens in problem-solving efforts, youth must develop the necessary tools required for this type of engagement. Programs rich in PYD and youth-leadership development have the capacity to provide an avenue for the success of youth as partners in problem solving. For young leaders, skill development, environmental factors, and commitment to action all act as gateways for active participation (Redmond & Dolan, 2016). DesMarais, Yang, and Farzanehkia (2000) denote that youth/adult partnerships, decision-making power, contexts for learning and service, and recognition of their experiences, knowledge, and skills are critical elements for success. When provided with these tools for success, youth participation offers an ample opportunity for approaching challenges of the 21st century from a more holistic and responsible perspective (Redmond & Dolan, 2016).

From this viewpoint, it is essential to expand the understanding of youth involvement in successful partnerships and to maximize inclusion in the problem-solving processes. This involves utilizing an RDS approach to consider youth civic engagement and citizenship development in relation to problem solving.

**Conceptual Model for Demographics, Ethical Factors, and Problem Solving as Predictors
of Active and Engaged Citizenship**

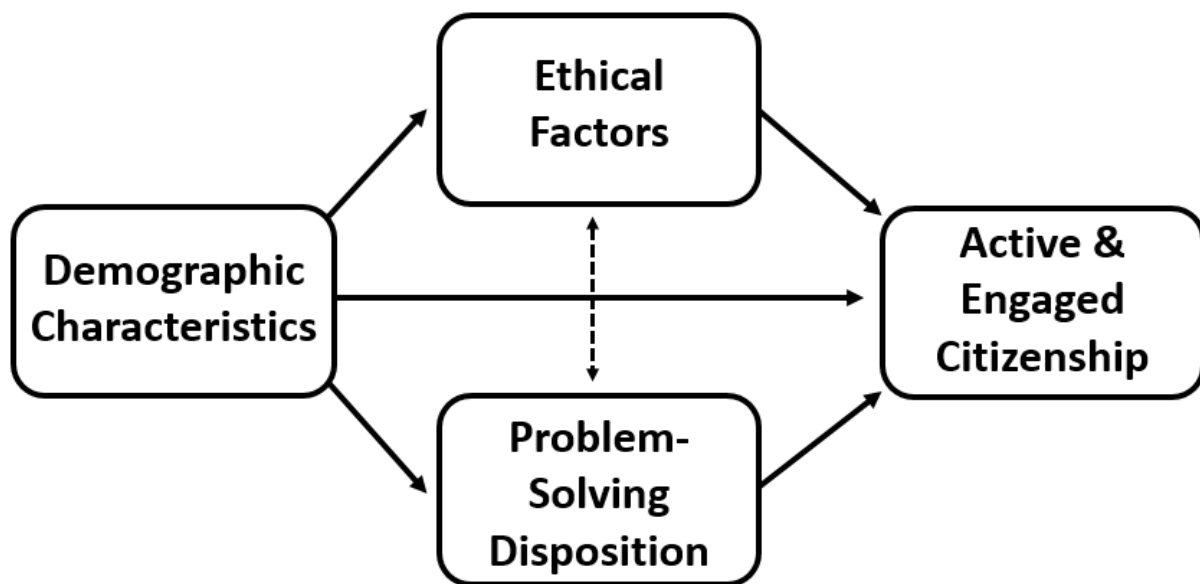


Figure 2-4. Conceptual model for demographics, ethical factors, and problem-solving disposition as predictors of AEC.

Within this conceptual model, demographics, ethical factors, and problem-solving disposition serve as predictors of AEC (Figure 2-4). Zaff et al. (2010) define an active and engaged citizen as someone who participates in civic behaviors with a sense of civic duty, social connection to community, and assurance of their capabilities to drive change. This operationalization incorporates civic action, civic skills, social connection, and duty as constructs of active and engaged citizens. An active and engaged citizen meaningfully contributes to their

community by doing more than just voting, paying taxes, obeying laws, and upholding community standards (Mihailidis & Thevenin, 2013). AEC development for youth requires a systematic approach to the expansion of civic context and promotion of citizenship (Zaff, Malanchuck, & Eccles, 2008).

Demographic Characteristics

As is described in RDS metatheory and sociocultural theory, individuals learn and grow based upon their personal lived experiences. Youth are heterogeneous in nature with different histories, cultures, and lived experiences that influence their views of and engagement in their communities (Bell, 2005). Differences in demographic characteristics, including activity participation, can serve as protective factors and decrease the likelihood of engagement in antisocial behaviors (Biggar, Forsyth, Chen, & Richard, 2016). A protective factor is an experience or contributing influence that often reduces the frequency in which youth partake in deviant behaviors (Burton & Marshall, 2005).

Protective factors are contextually historical, social, and cultural influences and are individual, family, or community-based (Crockett & Crouter, 1995). Individual-based factors include those associated with self-esteem and stress management. A positive family environment including parental monitoring and familial attachment, act as protective factors (Zolkowski & Bullock, 2012). Community-based factors often foster a sense of belonging, supportive relationships with adults other than one's parents, and religious or spiritual affiliations (American Psychological Association, 2002).

The Role of Youth Organizations

Participation in youth organizations often provides a multitude of protective factors for different deviant behaviors and increases a youth's sense of psychological well-being (Agans et

al., 2013; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Feldman & Matjasko, 2005; Kahne et al., 2001). Activity participation can be especially advantageous for high-risk urban youth with involvement increasing student engagement, academic achievement, and prosocial behaviors (Daly, Buchanan, Dasch, Eichen, & Lenhart, 2010). Additionally, youth organizations often include opportunities for participants to feel enjoyment while being challenged based on their interests (Fredricks & Eccles, 2005). Involvement often includes avenues for the development of a positive view and connection within one's community (Morrissey & Werner-Wilson) while being surrounded by positive role models and peer influences that establish mutual trust and commitment (Burton & Marshall, 2005; Feldman & Matjasko, 2005).

However, not all extracurricular activities or youth organizations demonstrate positive impacts on participants. Burton and Marshall's (2005) study did not provide evidence that extracurriculars served as protective factors for a sample that did not include those with high-risk factors. The results could also be an indication of the types of programs provided. Previous research indicates that structure and a safe environment correlate with the protective factors provided by the organization (Kahne et al., 2001). Feldman and Matjasko (2005) associate structured activities with positive developmental outcomes, including high academic performance, reduced school dropout rates, increased self-esteem, reduced feelings of social isolation, decreased substance use, lower sexual activity among females, and decreased antisocial behaviors. However, unstructured activities "were characterized by deviant peer relationships, poor parent-child relationships, and low levels of support from their activity leaders" (Feldman & Matjasko, 2005, p. 190). These unstructured activities often had negative impacts on youth by providing social groups, which promoted deviant behavior.

Peer impact. Within extracurricular activities, the impact of peer influence and role modeling is very similar. Youth learn behaviors from social modeling, which is reinforced through positive social responses (Akers, Krohn, Lanza-Kaduce, & Radosevich, 1979; Biggar et al., 2016; Crockett & Crouter, 1995; Kim, Lee, & Leban, 2017; van de Bogardt et al., 2017). Van de Bogardt et al. (2017) revealed a relationship between deviant behaviors and a peer group's views on the behavior, especially in relation to sexual activity. Often times, the reward and reinforcement from peers is greater than the negative response or punishing elicited by the behavior (Akers et al., 1979). Therefore, an adolescent's involvement in a youth organization or extracurricular activity can yield antisocial behaviors through imitation of the peers within the organization. This is not say that organizations with a high number of at-risk youth participants cannot have positive impacts on participants, but, without structure, negative influences can surpass the attempt to provide PYD.

4-H youth organization. 4-H is one of the longest running youth-centered programs in the country. Dating back to the early 1900s, 4-H continues to provide a safe and supportive environment for youth to engage in civic-minded projects (National 4-H Council, 2017). The 4-H Study of Positive Youth Development 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, Lerner, & Colleagues, 2013). Through this comprehensive study, 4-H members were shown to be more likely to contribute to their communities, to have increased academic achievement, and to make healthier choices (Lerner et al., 2013). 4-H has the capacity to increase PYD and decrease the likelihood for youth to participate in risky behaviors.

Ethical Factors

According to the Oxford University Press (2017), ethics can be defined as moral principles that dictate one's behavior or the likelihood of participating in an activity, which are often referred to as an individual's character. One's values, attitudes, and behaviors are incorporated within ethical factors. In 2012, the Josephson Institute of Ethics reported that 99% of young people value being a person with good character and 93% are satisfied with their own ethics. However, over 50% of respondents admit to lying and cheating within the past year and 20% admit to stealing (Josephson Institute of Ethics, 2012). These values, attitudes, and behaviors are consequential of character strengths and impact youth's engagement in and view of their community.

Character strengths heighten one's views on their capability to become an active and engaged citizen (Hilliard et al., 2014). Performance, moral, civic, and intellectual virtues are four diverse types of character strengths (Baehr, 2017). Performance virtues are derived from an innate desire to solve problems and achieve excellence and can double as moral, civic, or intellectual virtues (Baehr, 2017). A morally virtuous individual is driven from an intrinsic motivation to care about the well-being of others through compassion, kindness, and empathy (Baehr, 2017). Civic virtues, including tolerance, civility, and inclusion, expand beyond the benefits of a specific individual and encompass a desire to improve the well-being of society and community (Baehr, 2017). Intellectual character represents the yearning for knowledge expansion on truth, and an understanding embodied through open-mindedness and attentiveness to issues that impact society (Baehr, 2017).

The Influence of Character Development

Character is a psychological construct made up of characteristics that directly impact one's ability to be a moral human (Berkowitz & Bier, 2005). Character encompasses:

Attitudes such as the desire to do one's best and being concerned about the welfare of others; intellectual capacities such as critical thinking and moral reasoning; behaviors such as being honest and responsible, and standing up for moral principles in the face of injustice; interpersonal and emotional skills that enable us to interact effectively with others in a variety of circumstances; and the commitment to contribute to one's community and society. (Battistich, 2008, p. 82)

Character development occurs throughout a person's life, with adolescence and childhood being the prominent time of advancement (Berkowitz & Bier, 2004). A moral foundation for youth often increases "opportunities for positive life outcomes and decreases their likelihood for involvement in problem behaviors" (Battistich, 2008, p. 85). Parents, guardians, and family members are the first examples of morality. Within the first year of life, infants begin to develop concepts of people, attachment, and empathy (Berkowitz, 2002). Self-control, guilt, and perspective building are hallmarks of character development throughout childhood (Berkowitz, 2002). As these elements continue to develop, adolescents begin to formulate their own moral identities and reasoning skills (Berkowitz, 2002).

A strong sense of character and moral integrity can result in decreased negative behaviors such as aggression, antisocial behaviors, substance abuse, risky sexual activity, criminal activity, academic under-achievement, school absences, and suicide (Battistich, 2008; Berkowitz, 2000). Research indicates that specific character strengths are linked to decreased psychopathology and less internalization and externalization of behavior problems (Proctor et al., 2011). Additionally,

character development has been linked to positive outcomes such as “academic motivation and aspirations, academic achievement, prosocial behavior, bonding to school, prosocial and democratic values, conflict-resolution skills, moral-reasoning maturity, responsibility, respect, self-efficacy, self-control, self-esteem, social skills, and trust in and respect for teachers” (Berkowitz & Bier, 2004, p. 80). A wide array of outcomes results from character development because character is a set of positive traits that are transferable across cultures and throughout history (Park, 2004).

Youth who begin to develop strong character traits early on are more resilient to negative pressures and often develop a stronger prosocial identity. The initial impacts in character formation come from parenting, but school, peers, and community also influence their character development from infancy to adulthood (Berkowitz, 2002). Therefore, intentional and systematic character development and education throughout one’s developmental stages is ideal (Greenberg et al., 2003).

Problem-solving Disposition

Wicked problems today are increasing in number and complexity (Grint, 2005). Wicked problems do not have a right or wrong answer but do require the development of multiple solutions for consideration when deciding on the best solution for the context and environment of the problem at hand (Grint, 2005). To adhere to social justice principles and incorporate youth as collaborative partners in problem solving, youth must be equipped with the skills and tools necessary to be equal partners in the problem-solving process (DesMarais et al., 2000). However, youth must also have a positive problem-solving disposition toward engaging in problem-solving processes.

Problem-solving disposition encompasses attitudes, views, and beliefs regarding the problem-solving process and capabilities for participation. In relation to reasoned action approach, problem solving is a behavior, which requires positive attitudes toward the behavior, perceived norms, and perceived behavioral control for a participant to engage in problem solving. Problem-solving disposition relates to an individual's intention to engage in the problem-solving process.

Performance virtues require a heightened problem-solving disposition to partake in the process of solving complex and challenging wicked problems. Since problem solving is an integral part of life (Kirton, 2011), problem-solving disposition could greatly influence an individual's performance virtues, which can double as moral, civic, or intellectual virtues. Examining problem-solving disposition and ethical factors could provide insight on individuals' likelihood to engage in civic behaviors.

Conceptual Framework for Youth in Community Problem Solving

Figure 2-5 provides a conceptual framework for providing youth with the capacity and support necessary for youth to engage in problem-solving partnerships and ultimately become active and engaged citizens. Within the model, PYD acts as a pathway for lifelong leadership and, eventually, contribution to one's community. Youth-adult partnerships and positive peer relationships permit youth to discover their places within the greater community and recognize how to adhere to societal norms. Overall, youth develop an understanding of the collective sense of community in which they live. Self-consciousness and identity formation are assembled through experiences, knowledge, and skills, which allows youth to envision how their own competencies can benefit their community. This development involves mutually influential relations and also accounts for background factors and adaptive developmental regulations.

Problem-solving partnerships involve safe environments and support for youth to be equal contributors, profit economic, social, political, and environmental challenges within their communities. Participation within these experiences increases competencies and culminates in AEC. Engaged youth citizens view themselves as leaders and find ways to intentionally impact their communities.

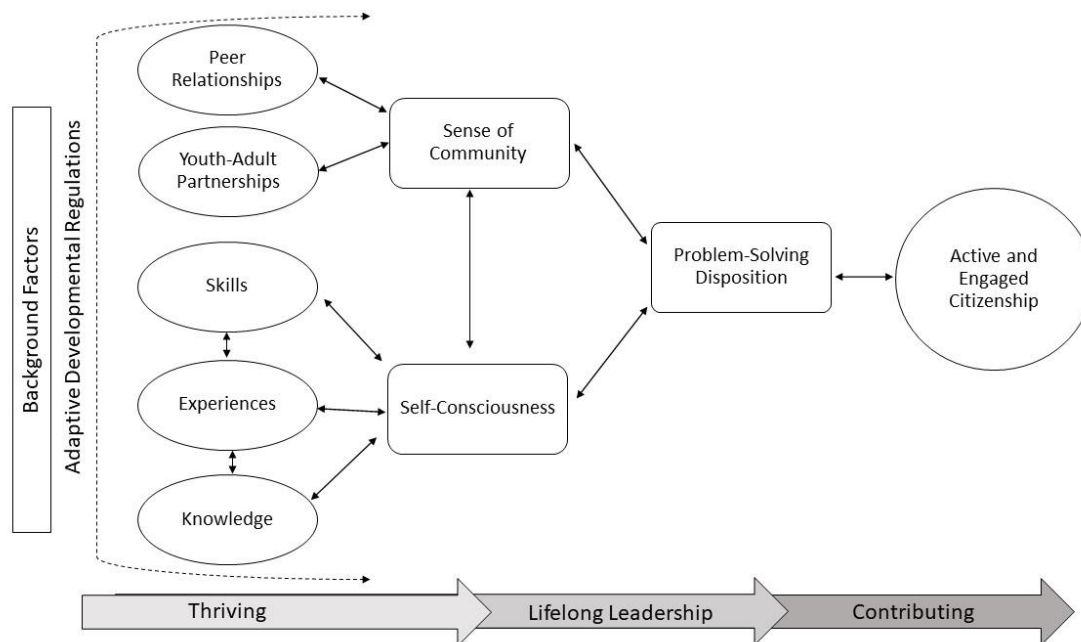


Figure 2-5. Conceptual Model for Youth in Community Problem Solving (YCPS).

Thriving. This conceptual framework is built on PYD and opportunities for lifelong leadership. Within PYD, there are “Five Cs” for thriving youth, which include competence, confidence, connection, character, and caring (Zarrett & Lerner, 2008). Thriving youth cultivate their talents for contribution, which is sometimes described as the sixth “C”, and engage effectively in civic endeavors through contributions to family, community, self, and civil society (Larson, 2000; Lerner, Dowling, & Anderson, 2003).

Leadership can be viewed as a continuous learning process, which is built upon knowledge and experience for advancing capacities and extends through one’s life span

(Brungardt, 1997; Hanks et al., 2015). The leadership identity development (LID) model supports this journey by acknowledging various stages of progression through leadership development (Komives, Longerbeam, Owen, Mainella, & Osteen, 2005). Many youth leadership models exist, but these models lack the collective capacity required for AEC (Heifetz, 1994; Kahn, Hewes, & Ali, 2009; Klau, 2006; Redmond & Dolan, 2016; Ricketts & Rudd, 2002; van Linden & Fertman, 1998; Wang & Wang, 2009; Zeldin & Camino, 1999). Youth leadership from this perspective incorporates character-based values and the development of shared vision for community change.

Self-consciousness. Self-consciousness provides youth with an understanding of how their skills, experiences, and knowledge can be applied in their environments. Skills, knowledge, and experiences provide an avenue for self-efficacy, metacognition, and self-regulation to develop self-consciousness and, ultimately, control events within one's life (Schunk, 2016). Self-consciousness affords youth confidence and competence when collaborating and problem solving. This portion of the model has a theoretical foundation in situated cognition and sociocultural theory. In situated learning, youth build a collective construction of knowledge through critical reflection and discussions on previous experiences (Miller, 2002). Within sociocultural theory, knowledge, a social cognitive process, is constructed between multiple individuals and impacts youth development through developed cultural perspectives (Alfred, 2002).

Sense of community. Supportive relationships with peers and adults provide youth with a sense of community. Youth require support and a safe place for reflection to build their own identities (Komives et al., 2005). Positive peer relationships yield social comparison and play a foundational role in the development of one's sense of belonging (Schunk, 2016). Social

comparison can either benefit youth or degrade their self-concept, but supportive environments with both peer and adult relationships provide positive development experiences and decrease the likelihood of negative social comparison (Anderson & Sandmann, 2009). Youth-adult partnerships can lead to: increased self-confidence, self-esteem, and self-worth; a decrease in powerlessness; the feeling of being taken seriously; an ability to function well in the world; a growing positive self-concept; a decrease in risky/deviant behavior; a decrease in self-destructive actions; and an overall feeling of being loved and/or wanted (Bell, 2003).

Through self-determination and self-worth, which are built through these relationships, youth can find their place in their communities and in the world (Ramey, Rose-Krasnor, & Lawford, 2017). These relationships also provide a safeguard for failure and provide insurance for self-worth when mutual trust, power sharing, access to information, and authority make decisions necessary (Camino, 2000; Ramey et al., 2017). Sense of community impacts self-consciousness through self-worth and the development of self-efficacy.

Problem-solving disposition. Developing a sense of community and self-consciousness prepares youth for engaging in problem-solving partnerships and heightens the development of problem-solving disposition. When youth participate in community problem-solving efforts, they experience optimal development, bridge the gap in knowledge, and bring diversity to the table (Camino, 2000; Lasker & Weiss, 2003). Youth can be equal partners with supportive youth-adult partnerships when the zone of proximal development is utilized to determine the amount of autonomy and support youth partners need (Schunk, 2016). Problem-solving disposition can serve as an avenue for examining a youth's zone of proximal development. The key to these partnerships is to allow for mistakes and to provide encouragement and opportunities for critical reflection so that youth can develop a greater sense of autonomy in the problem-solving process.

What is Youth Leadership?

Leadership is a social process, which involves the development of skills and an understanding of how to interact with and lead others; development begins as early as five years of age (van Linden & Fertman, 1998). Experiences throughout life influence how people interact with others and view the world; leadership is a lifelong developmental process (Hanks et al., 2015). Leadership development programs for youth should be designed to respond to the demands of youth development and differ from those established for adult learners.

In the leadership field of study, a common definition for youth leadership is often debated. Youth leadership programs often define youth leadership through two starkly different lenses; one is focused on individual development, while the other places emphasis on collaborative practices (Conner & Strobel, 2007). Mortensen et al. (2014) revealed that youth value listening, role modeling, and helping others as key characteristics of leaders, which coincides with Redmond and Dolan's (2016) perspective that youth view leadership as collaborative and relational. Kress (2006) provides the following definition for youth leadership: "the involvement of youth in responsible, challenging action that meets genuine needs, with opportunities for planning and decision making" (p. 51). This definition indicates the need for youth to develop their own abilities, apply those abilities in a variety of contexts, and work with others to drive change within their communities.

Virginia 4-H teen leadership. In Virginia 4-H, teen-leadership programs and clubs aim for youth to: increase and maintain knowledge of self and self-esteem, increase responsibility and the ability to make complex decisions, set goals and develop strategies to reach those goals, become increasingly independent from parents/caregivers, develop strong relationship skills, and increase interpersonal communication skills (Price & Elmer, 2015). These 4-H teen-leadership

programs vary in length and treatment; short-term opportunities often include camp-counselor, weekend-long, or day-long trainings, and long-term opportunities include year-round clubs and statewide positions.

4-H clubs aim to develop leaders, but they also aim to increase capacity for youth's likelihood to contribute to their community and society. The 4-H Citizenship program hopes for youth to "make a positive difference by engaging in learning opportunities that give them a heightened sense of responsibility and capacity to connect as active members of their communities, nation and world" (4-H National Headquarters, 2011, p.1). A study conducted by Lerner et al. (2013) implicates that 4-H's impact on youth indicates that 4-H members are twice as likely to be civically engaged within their communities and four times more likely to contribute to society than were non-4-H members.

Chapter Summary

This chapter addressed community viability and ways in which youth can contribute to community viability. An overview of historical works related to youth development and inquiry were discussed at length providing a case for utilizing a variety of analyses to support findings and draw conclusions within social science. Relational developmental systems (RDS) metatheory, sociocultural theory, and reasoned action approach were presented as a theoretical foundation for the study. Conceptual models and supporting literature were provided for variables within the study. Finally, an overview of youth leadership was provided to set a context for the sample of participants.

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CHAPTER 3

MANUSCRIPT #1

Teen leadership as a pathway: The impact of ethical factors, demographics, and problem-solving disposition on active and engaged citizenship

Youth have the capacity to contribute meaningfully to their communities and should be viewed as community resources. Teen leadership initiatives, infused with positive youth development, in Virginia 4-H provide opportunities for youth to develop active and engaged citizenship (AEC) who participate in civic endeavors. This study sought to examine the influence of ethical factors, demographics, and problem-solving disposition on a youth's level of AEC. An ex post facto survey design with participants in long-term and short-term 4-H teen-leadership programs was used to explain the relationship between these variables. The findings indicated both ethical factors and problem-solving disposition significantly explained AEC for both treatments. Youth leadership programs should incorporate problem-solving opportunities and character education to bolster AEC.

Introduction

Youth have the capacity to play a role within community development. Many youth-development programs, however, focus on developing youth for roles as future citizens rather than engaging youth as current community leaders and citizens. By incorporating youth within community-development efforts, communities can increase the diversity of ideas and views on community projects and initiatives (Brennan, 2008; Christens & Dolan, 2011). Brennan (2008) stated "youth bring new ideas, resources, enthusiasm, and serve as the basis for long-term sustainable community development efforts" (p. 56). To do so, youth development professionals should be aware of the attitudes, values, and beliefs, which motivate youth to participate as active and engaged citizens.

Larson (2000) posits initiative for deeper participation and intrinsic motivation to achieve a common goal are assets for youth engagement in civic participation. An active and engaged citizen requires a sense of civic duty and confidence in their ability to affect and drive change (Zaff, Boyd, Li, Lerner, & Lerner, 2010). Therefore, youth must have a sense of belonging and commitment to their communities in order to engage as citizens. Citizenship is defined as “the ability to move beyond one’s individual self-interest and to be committed to the well-being of some larger group of which one is a member” (Sherrod, Flanagan, & Youniss, 2002, p. 265). To do so, AEC must be examined through behavioral, cognitive, and socioemotional lenses (Zaff et al., 2010).

Teen Leadership Programs

Leadership is a social process (van Linden & Fertman, 1998) with youth leadership often defined through two starkly different lenses. Some are focused on individual developmental processes, while others place more importance on collaborative practices (Conner & Strobel, 2007). Mortensen et al. (2014) found “youth emphasized listening to others, being a good role model, and helping others when asked to identify leader characteristics” (p. 448). These results agreed with similar studies, which indicate a shift in youth’s views on leadership to be more collaborative and relational in nature (Redmond & Dolan, 2016) that calls for a shift in youth-leadership programs to encompass more than simply the developing of self. Kress (2006) proposes youth leadership as, “the involvement of youth in responsible, challenging action that meets genuine needs, with opportunities for planning and decision making” (p. 51). This definition provides support for youth leadership efforts to include an opportunity for youth to develop their own capacity, implement their learned skills, and collaborate with others to positively impact their communities.

Historically, youth organizations and professionals implemented programs for youth-leadership development prior to full research and theory development (Conner & Strobel, 2007). This led to a lack of training for those implementing the programs and resulted in programs based on knowledge transfer with a lack of formal leadership training (Ricketts & Rudd, 2002). Current programs employ icebreakers and cooperation games or opportunities for authentic practice, but few incorporate both skill training and implementation of skills in intentional ways (Klau, 2006; Redmond & Dolan, 2016). Intentionality is central within a successful leadership development program with exemplary programs including “the deliberate teaching of learning opportunities or life skills within a program- paired with strategic decisions to create opportunities that maximize developmental outcomes” (Bean, Harlow, & Kendellen, 2017, p. 76).

Implementers of exemplary teen-leadership programs utilize theory and practice within the development, implementation, and evaluation of their programs. Van Linden and Fertman (1998) posit awareness, interaction, and mastery as the three distinct phases of leadership development. Ricketts and Rudd (2002) expanded these phases by including the processes of comprehension, analysis, application, synthesis, and evaluation within each phase. These models provide a solid foundation for program development. In practice the future orientation of developmental outcomes is one common issue with modern teen leadership programs where adolescents are often viewed through a traditional power lens as people with insignificant impact in their communities. This results in preparation aimed at future leadership roles rather than providing teens with a voice as a current leader (Mortensen et al., 2014). “Youth have both the awareness and desire to create change” (Mortensen et al., 2014, p. 451). Providing teens with the capacity to act as leaders within their community with mentors to guide their development

provides youth with invaluable experiences and increases capacity within their communities (Redmond & Dolan, 2016).

Virginia 4-H teen leadership. Teen leadership programs in Virginia 4-H are designed with the following goals: for youth to increase and maintain knowledge of self and self-esteem of youth; increase responsibility and the ability to make complex decisions; set goals and develop strategies to reach those goals; become increasingly independent from parents/caregivers; develop strong relationship skills; and increase interpersonal communication skills (Price & Elmer, 2015). 4-H teen leadership programs vary in length and treatment. Short-term opportunities often include weekend-long trainings and camp counselor trainings, which are run at both the state and county level. Long-term programs often include year-long county-based programs or opportunities to serve in statewide leadership positions, such as the State 4-H Cabinet.

In addition to leadership training, 4-H aims to develop citizens prepared to contribute to their own communities and society. The vision for the 4-H Citizenship Program is for youth to “make a positive difference by engaging in learning opportunities that give them a heightened sense of responsibility and capacity to connect as active members of their communities, nation and world” (4-H National Headquarters, 2011, p.1). 4-H is making strides toward this vision with 4-H members almost four times more likely to contribute and two times more likely to be civically engaged within their communities than non-members (Lerner, Lerner, & Colleagues, 2013).

Little is known about the impact of character virtues and ethical factors on youth’s likelihood to participate as active and engaged citizens. Further, youth must have a positive problem-solving disposition to feel confident in their abilities to influence change in their

communities. Therefore, examining the effect that ethical factors, demographics, and problem-solving disposition have on active and engaged youth citizenship can provide a pathway for understanding youth's likelihood to exhibit citizenship behavior.

Purpose/Objectives

The purpose of this study was to explain the influence of ethical factors, demographics, and problem-solving disposition on AEC of youth participating in teen-leadership programs.

What is the impact of ethical factors, demographics, and problem-solving disposition on active and engaged citizenship for youth participating in a youth-leadership program?

1. Describe the ethical factors, demographics, problem-solving disposition, and active and engaged citizenship results for youth participating in leadership-development programs.
2. Examine the relationship between participants' ethical factors and active and engaged citizenship for youth participating in leadership-development programs.
3. Examine the relationship between participant demographics and active and engaged citizenship for youth participating in leadership-development programs.
4. Examine the relationship between participants' problem-solving disposition and active and engaged citizenship for youth participating in leadership-development programs.
5. Determine if ethical factors, demographics, and problem-solving disposition significantly impact active and engaged citizenship for youth participating in leadership-development programs.

Theoretical Framework

Sociocultural theory and reasoned action approach served as the theoretical framework for this study. Sociocultural theory provides a basis for understanding how culture and

environment impact youth development. Reasoned action approach proposes a means for examining how attitudes, values, and beliefs impact one's behavior.

Sociocultural Theory

At the core of social cognitive theory is behavior, which is dynamic and based on an individual's personal and environmental factors (Holtzapple et al., 2011). Within social cognitive theory, Bandura (1971) postulates that patterns of actions and behaviors through observations and experiences as one's social learning. One's self-monitoring of effects, affective self-reaction, and judgement of contextual circumstances determine an individual's self-regulation and self-influence (Bandura, 1991). All individuals engage in vicarious learning, self-regulation, symbolizing, forethought, and self-reflection in different capacities (Stajkovic & Luthans, 2003). This engagement results in the development of personal agency. Personal agency includes intentional actions (Bandura, 2001) which can be predicted as future actions, including engagement in civic behaviors.

Sociocultural theory is a derivative of social cognitive theory. Sociocultural theory is based on the premise that individuals find meaning in their experiences through social mediation (Vygotsky, 1978). Mahn (1999) suggests social interactions throughout one's development influence symbolism and culture. The three central themes of social-cultural theory are genetic analysis, social sources of individual development, and semiotic mediation in development (John-Steiner & Mahn, 1996). Therefore, as an individual grows and develops, social learning is processed through genetics, symbols, and social interactions with others (Mercer & Howe, 2012).

Culture is collective, emotional, symbolic, historical, dynamic, and fuzzy (Alfred, 2002). Culture can be viewed as collective because it is not created by one individual, but rather shared

with others in their immediate environment. Emotions come into play, based on their background, when individuals manage their own rationale within their environment (Alfred, 2002). Symbolism represents the practical and technical side of human interaction. Historical views on culture involved the embeddedness of one's history and their inability to disassociate from their history. Histories are dynamic in nature, which impacts one's culture. Finally, due to cultural ambiguities and paradoxes, Alfred (2002) views culture as fuzzy. All individuals are products of their lived experiences and genetics. Therefore, a youth's views on civic participation and likelihood to become active and engaged citizens are impacted by their environment and context.

Learned positive behavior. Steege and Sullivan (2009) described how learned positive behavior relates to social cognitive theory and results in the behavior application of upholding high moral standards. Positive behavior including AEC can be learned over time. Interventions and preventions for increasing AEC should focus on behavioral maintenance that occurs when a behavior trait is continuously displayed over an extended period of time (Steege & Sullivan, 2009). Behavioral maintenance results in generality which encompasses the capacity to transfer the behavior to different settings and associate the behavior with related behaviors that can be taught through sequential modification in a variety of contexts (Steege & Sullivan, 2009).

AEC can be bolstered by utilizing the relevance of behavior rule (Allyon & Azrin, 1968). This rule requires that taught behaviors should be transferable to a natural environment and utilized over time (Allyon & Azrin, 1968). When aiming to achieve learned positive behaviors, facilitators should consider age-appropriateness and scaffolding, which involves continued development through social cognition (Steege & Sullivan, 2009). Youth should be encouraged to develop self-monitoring and self-reinforcement to advance their own self-control within social

situations to fully achieve a learned positive behavior. This learning results in cultural associations which are developed through one's contextual and environmental relations.

Reasoned Action Approach

Also derived from Bandura's (1971) social cognitive theory, reasoned action approach provides a basis for a model of how one decides to partake in a specific behavior (Fishbein & Ajzen, 2010). Within the reasoned action approach, background factors impact beliefs and, ultimately, result in the formation of attitudes, perceived norms, and perceived behavioral control. Attitudes, perceived norms, and perceived behavior control drive a person's intentions, which theoretically culminates in behavior as displayed in Figure 3-1. (Fishbein & Ajzen, 2010).

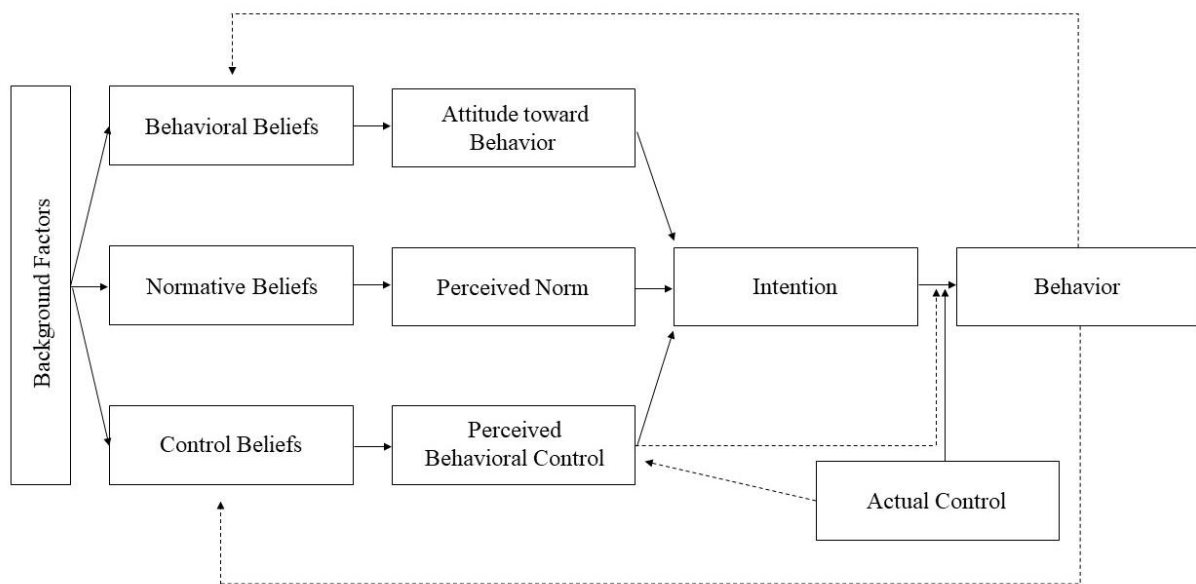


Figure 3-1. Adapted from Fishbein & Azjen's (2010) reasoned action approach model.

Within the reasoned action approach, there are distinct types of beliefs: behavioral, normative, and control. Behavior beliefs are developed based on an individual's forecast of benefits and consequences from partaking in a specific behavior. Behavioral beliefs affect attitude toward performing a behavior based on one's projection of positive and/or negative consequences (Fishbein & Ajzen, 2010). A person's view of other's perceptions of the behavior

impact their normative beliefs. Normative beliefs are based on whether one feels others around them will approve or disapprove of the behavior. Normative beliefs result in perceived norms, which are based on social pressures and prediction of social responses (Fishbein & Ajzen, 2010). Control beliefs are developed from environmental and personal factors, which may impede or enable one's competence for carrying out the behavior. Behavioral control and a sense of self-efficacy toward the control belief leads to perceived behavioral control (Fishbein & Ajzen, 2010).

Personal intentions are contrived from the accumulation of attitudes, perceived norms, and perceived behavior control (Fishbein & Ajzen, 2010). Behavioral intention is one's willingness and preparedness to engage in a specific behavior (Fishbein & Ajzen, 2010). When examining actual control based on skills, abilities, and environmental factors, behavior intentions are the predominate predictor of the behavior (Fishbein & Ajzen, 2010). An affinity toward specific attitudes, perceived norms, and perceived behavior control impacts the likelihood for one to engage in a behavior. Background factors also contribute to behavioral outcomes.

Fishbein and Azjen (2010) posit:

A multitude of variables could potentially influence the beliefs people hold: age, gender, ethnicity, socioeconomic status, education, nationality, religious affiliation, personality, mood, emotion, general attitudes and values, intelligence, group membership, past experiences, exposure to values, intelligence, group membership, past experiences, exposure to information, social support, and coping skills (p. 24).

These background factors are difficult to attribute to a specific behavior based on the heterogeneous development, environment, and culture of individuals.

Conceptual Framework

The conceptual framework for this study consists of demographics, ethical factors, and problem-solving disposition as predictors of AEC (Figure 3-2). AEC is operationalized as “someone who has a sense of civic duty, feeling of social connection to their community, confidence in their abilities to effect change, as well as someone who engages in civic behaviors” (Zaff et al., 2010, p. 737). This definition integrates civic action, civic skills, social connection, and duty as constructs of active and engaged citizens. This approach moves past “dutiful” citizenship and toward AEC (Mihailidis & Thevenin, 2013). A dutiful citizen is one who votes, pays taxes, obeys laws, and upholds community standards. However, an active and engaged citizen is one who contributes to their community meaningfully. Zaff, Malanchuck, & Eccles (2008) postulate utilizing a systematic approach where civic context is developed to encourage citizenship as an avenue for increasing AEC in youth.

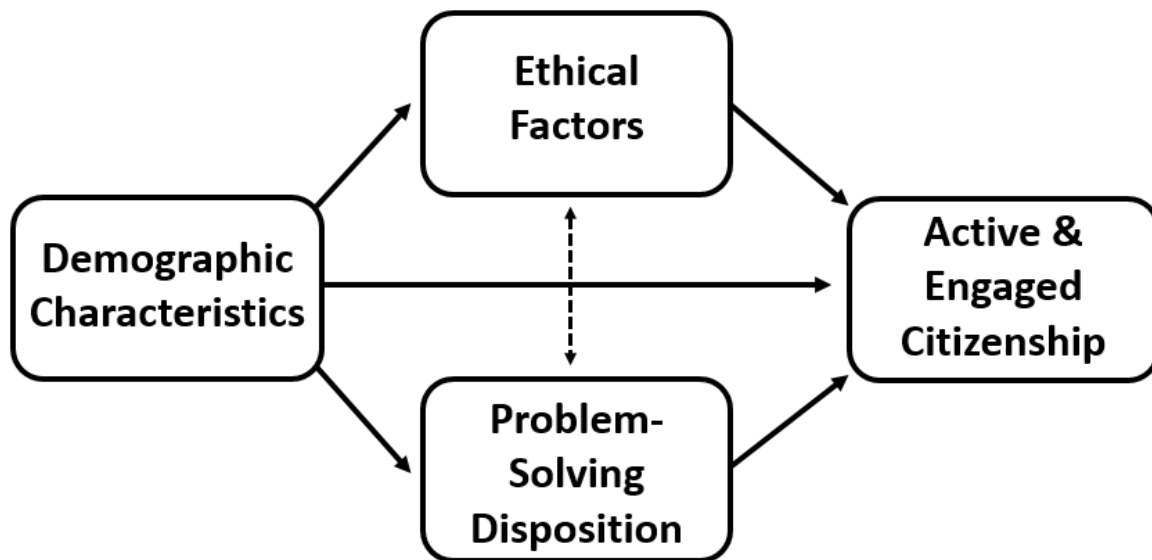


Figure 3-2. Conceptual model for demographics, ethical factors, and problem-solving disposition as predictors of AEC.

Demographic Characteristics

To understand how individuals grow into active and engaged citizens, we need to examine how personal experiences impact how youth contribute and view their contributions to their communities (Mihailidis & Thevenin, 2013). Bell (2005) emphasized the importance of analyzing youth as a heterogeneous group with a multitude of experiences that impact their views and experiences as citizens. This includes considering demographic characteristics for their effect on AEC. Certain demographic characteristics serve as protective factors that reduce the risk of antisocial behaviors and promote prosocial behaviors, such as AEC (Biggar, Forsyth, Chen, & Richard, 2016). Burton and Marshall (2005) define protective factors as inputs anticipated to reduce deviant behaviors for those at risk. Protective factors are often individual, family, or community-based and are contextually historical, social, and cultural (Crockett & Crouter, 1995).

Extracurricular activity participation and involvement in youth organizations can provide protective factors for a range of deviant behaviors and a heightened sense of psychological well-being (Agans, Champine, DeSouza, Mueller, Johnson, & Lerner, 2013; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Feldman & Matjasko, 2005; Kahne et al., 2001). Daly, Buchanan, Dasch, Eichen, & Lenhart (2010) found active participation to be beneficial for high-risk urban youth with involvement yielding increased student engagement, academic achievement, and prosocial behaviors. Extracurricular activities are often attractive because they provide opportunities for adolescents to feel enjoyment and challenged based on their own interests (Fredricks & Eccles, 2005). Impacts of extracurricular activities vary based on type, level of involvement, and specifics of the program (Roth & Brooks-Gunn, 2016). Positive role models and peer support provided from some youth organizations allow youth to develop an

understanding of mutual trust and the benefit of commitment (Burton & Marshall, 2005; Feldman & Matjakso, 2005). In contrast, low activity participation or a change in participation can indicate an increase in risk behaviors (Agans et al., 2013).

Ethical Factors

Attitudes, beliefs, and values impact one's view of their community and their role within it. Character strengths enhance individual views on their ability to participate as an active and engaged citizen (Hilliard et al., 2014). Character strengths include four distinct virtues: moral, civic, intellectual, and performance (Baehr, 2017). Moral virtues are those that involve compassion, kindness, and empathy for others. Those with moral virtues have a desire to help others in need (Baehr, 2017). Civic virtues involve a greater concern for the greater society, including tolerance, civility, and inclusion (Baehr, 2017). Intellectual virtues embody an individual's affinity for learning a greater understanding and truth. Performance virtues include those that are not motivated by a specific need, but rather a desire to solve complex and challenging problems (Baehr, 2017). A virtue can be both a performance virtue and a moral, civic, or intellectual virtue. Individuals are influenced by ethical factors, which are derived from character strengths. Little is known about the impact of individual character strength on AEC.

Problem-solving Disposition

Performance virtues encompass problem-solving disposition or attitudes, views, and beliefs regarding problem solving and their capacity for participation in problem solving. Within reasoned action approach, participants require positive perceived norms, attitudes toward the behavior, and perceived behavioral control to participate in a behavior (Fishbein & Ajzen, 2010). Problem-solving disposition is an individual's intention to partake in the problem-solving process. An individual's intention—the readiness to perform the behavior based on the person's

attitudes—is the best predictor of their likelihood to participate in a behavior, in this case the problem-solving process.

Since performance virtues can double as moral, civic, or intellectual virtues, it is essential to consider the role a problem-solving disposition may play in an individual's likelihood to partake in AEC. Additionally, problem solving is an integral part of life (Kirton, 2011).

Community contributors and leaders are often challenged to provide solutions for a wide range of problems. Since identity formation is a pinnacle part of youth development (Erikson, 1997), youth's views on their roles and capacity to problem solving could provide a great deal of insight on how they view of themselves as contributors to their communities. This view would ultimately impact their attitude, norms, and behavioral control and likelihood to engage in citizenship behaviors.

Methods

This study utilized a non-experimental, ex post facto survey design (Ary, Jacobs, Irvine, & Walker, 2018). The researcher utilized this design in order to observe, in a realistic setting, participants who have received the treatment of a teen-leadership program. For the purpose of this study, all participants had already participated in a 4-H teen-leadership training or program, but there were variations on the treatment received and the geographical locations. Participants received the treatment either through long-term participation in a year-round teen club or through a short-term leadership training. Based on the limitations of an ex post facto design, results were only generalizable to participants of teen-leadership programs within Virginia 4-H (Ary et al., 2018).

The dependent variable within this study was responses on the active and engaged citizenship (AEC) scale. Demographic characteristics, problem-solving disposition, and ethical

factors served as the independent variables. Due to the reliability of the instruments utilized to determine the independent variable, common cause and reverse causality did not pose a problem in this study. Questionnaires were directly administered, which lowers the level of generalizability but yielded a higher response rate. This study used the Dillman Tailored Design Method (DTDM) to build an appropriate questionnaire and employ social exchange techniques (Dillman, Smyth, & Christian, 2009). The researcher attended meetings for multiple teen-leadership clubs and trainings to distribute the surveys to participants. The results were analyzed to report descriptive statistics and statistical significance utilizing a multiple linear regression.

Sample

The population within this study was all teens, ages 13-19, participating in teen leadership programs and trainings conducted by Virginia Cooperative Extension (VCE). The sampling frame included a population sample of all strong, year-round teen-leadership clubs, as identified by the VCE state extension specialist for 4-H youth development. The VCE state extension specialist identified these programs as those who aim to meet the goals for teen leadership and institute year-round training in leadership for participants. The researcher utilized a purposive sample for the comparison of 4-H members participating in short-term leadership programming, such as a weekend-long camp-counselor training. Short-term programs did not include year-round training and met less than four times a year. These programs included leadership as a component, but it was not the sole focus of the program.

Instrumentation

The researcher identified two previously established instruments to utilize for data collection: the Report Card on the Ethics of American Youth (Josephson Institute of Ethics, 2012) and the AEC Scale (Bobek, Zaff, Li, & Lerner, 2009). The researcher adapted the Report

Card on the Ethics of American Youth to include the following constructs: ethical views, unethical views, and ethical behaviors. Additionally, the researcher developed a demographic questionnaire utilizing DTDM and created a problem-solving disposition instrument based on the EMI, Critical Thinking Disposition Assessment (Irani, Rudd, Gallo, Ricketts, Friedel, & Rhoades, 2007). The demographic questionnaire collected information on gender, age, grade, race, Hispanic or Latino ethnicity, Honors/AP course, and questions regarding activity involvement. For activity involvement, participants responded to eight items regarding their participation in different types of activities on a 6-point Likert scale (from 1 = “Never” to 6 = “Every day”). Additionally, participants who worked eight or more hours a week received an additional six points to their activity involvement score. Scores could range from 9 to 54.

The Report Card on Ethics of American Youth is a questionnaire that has been utilized every two years since 1998, sampling over 20,000 students across the nation (Josephson Institute of Ethics, 2017). The questionnaire examines ethical values, attitudes, and behaviors. Dr. Rick Hesse validated the instrument to have an error margin of plus or minus less than one percent (Josephson Institute of Ethics, 2012). Within this study, the overall instrument yielded a Cronbach alpha of .824 in this study. Participants responded to nine items on their opinions of ethical or unethical statements on a 4-point Likert scale (1 = “Strongly disagree”, 2 = “Disagree”, 3 = “Agree”, 4 = “Strongly agree”, and 0 = “No opinion”). Youth answered 14 items on the importance of material items and character values, such as popularity, wealth, respect, and pleasing parents on a 4-point Likert scale (1 = “Unimportant”, 2 = “Moderately important”, 3 = “Very important”, 4 = “Essential”, and 0 = “No opinion”). From these 23 items, two subscales emerged representing ethical views ($\alpha = .785$) and unethical views ($\alpha = .710$). The unethical views items were reverse coded for high scores to be representative of a participant having

higher character virtues. Additionally, respondents answered 14 items regarding participation in unethical behaviors ($\alpha = .844$) in the past year on a 3-point Likert scale (1 = “Two or more times”, 2 = “Only once”, and 3 = “Never”). If respondents had an opinion for every item, total ethical factor scores had a potential range of 37 to 134.

The AEC instrument analyses attitudes and behaviors toward citizenship (Bobek et al., 2009). This 32-item scale examines emotional, cognitive, and behavioral components of citizen engagement and connection to community. The researcher adapted the scale to include social media usage. Participants responded to 28 items on a 5-point Likert scale and 3 questions regarding amount of participation on a 6-point Likert scale (from 1 = “Never” to 6 = “Every day”). The lowest possible score on the full scale was 32 with the highest being 163. There are four factors in the AEC scale: civic duty ($\alpha = .741$), civic skills ($\alpha = .812$), neighborhood connection ($\alpha = .766$) and civic participation ($\alpha = .609$). Although the reliability for the civic participation scale was low a previous study from Bobek et al. (2009) found a Cronbach alpha of .73. Therefore, the researcher deemed the factor of civic participation usable.

To create an instrument to assess problem-solving disposition the researcher adapted questions from the EMI, which examines critical thinking disposition (Irani et al., 2007). The researcher utilized a pilot study to discern questions for problem-solving disposition. Based on the pilot study, the researcher chose 11 questions to be utilized within the study. The problem-solving disposition instrument yielded a Cronbach alpha of .871 in this study. Potential scores could range from 11 to 55.

Data Collection

The researcher directly administered the instruments face-to-face on scheduled dates and times. The researcher collected data over a two-month time period. Participants from 14 strong,

year-round teen-leadership programs run in 4-H through VCE, as identified by the VCE state extension specialist for 4-H youth development, were recruited youth for participation. The researcher contacted all 14 extension agents and attended 11 4-H teen leadership club meetings to collect data from different counties. From the 11 counties, there were 275 potential participants with 199 respondents for a response rate of 72.36%. For a comparison sample, the researcher contacted 14 additional extension agents and collected data from nine short-term 4-H camp counselor trainings, which integrated leadership development. From the nine counties, there were 95 potential participants with 60 completing the survey for a response rate of 63.16%. There was an overall response rate of 70% from both groups. The VCE agents disseminated recruitment and Institutional Review Board (IRB) consent and assent forms to both parents/guardians and youth within their own programs prior to the data collection date. Gaining guardian consent was a limitation in this study. Youth without guardian consent were often willing to participate, but unable to do so based upon IRB requirements and ethical requirements to obtain consent from guardians which decreased response rates. The survey took participants approximately 30 minutes to complete.

Data Analysis

Descriptive statistics, frequencies (*f*), percentages (*P*), means (*M*), and standard deviations (*SD*), were used to describe demographic characteristics, ethical factors, problem-solving disposition, and the AEC scale responses. T-tests were used to determine statistical differences between participants in long-term and short-term 4-H teen-leadership programs for activity involvement, ethical factors, problem-solving disposition, and AEC.

The researcher employed step-wise linear regression to examine the relationships between AEC and ethical factors, demographics, and problem-solving disposition. The

researcher then used linear regression to examine the relationship between a single continuous dependent variable and multiple explanatory variables (Keith, 2015). Youth's AEC score was the dependent variable in this study. The first regression model included ethical factors as continuous independent variables. The second model encompassed the demographic characteristics and activity involvement as independent variables. The independent variable in the third model was problem-solving disposition. The fourth model utilized ethical factors, demographics, and problem-solving disposition as independent variables. Within this analysis, the researcher utilized a collection of design or dummy variables to represent different categories for categorical independent variables (Hosmer & Lemeshow, 2000). The dummy variables determined the odds of the independent variable being represented in one category relative to the baseline category. An alpha level of 0.05 was set a priori for all models.

Results

The participants included 199 youth participating in long-term 4-H teen-leadership programs and 60 youth in short-term programs. The mean age of participants in long-term programs ($M = 15.42$, $SD = 1.35$) was slightly higher than that of short-term program participants ($M = 14.78$, $SD = 1.26$). The majority of participants in both groups were female, white, took Honors/AP course, and were not Hispanic/Latino. Participants in long-term 4-H teen-leadership programs ($M = 115.88$, $SD = 17.76$) had significantly higher AEC scores when compared with peers in short-term programs ($M = 109.55$, $SD = 12.26$), $t(260) = 2.58$, $p < .05$. The long-term participants ($M = 50.35$, $SD = 8.71$) also yielded significantly higher scores when compared with short-term participants ($M = 46.12$, $SD = 4.83$) on the civic duty subscale, $t(260) = 3.60$, $p < .05$. Participants in long-term and short-term 4-H teen-leadership programs did not

differ significantly on levels of activity involvement, ethical factors, problem-solving disposition, civic skills, neighborhood connection, or civic participation.

Table 3-1

Means, Standard Deviations, Frequencies, and Percentages for Participants by Leadership Treatment (n =259)

Demographic	Long-term (n=199)		Short-term (n=60)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age	15.42	1.35	14.78	1.26
	<i>f</i>	P	<i>f</i>	P
Gender				
Male	66	33.2	17	28.3
Female	133	66.8	43	71.7
Grade Level				
7 th Grade	6	3.0	2	3.3
8 th Grade	23	11.6	13	21.7
Freshman	53	26.6	26	43.3
Sophomore	57	28.6	10	16.7
Junior	30	15.1	6	10.0
Senior	37	13.6	3	5.0
College Freshman	3	1.5	0	0
Hispanic or Latino				
Yes	10	5.0	2	3.3
No	182	91.5	58	96.7
Prefer not to state	7	3.5	0	0
Race/Ethnicity				
White	164	82.4	46	76.7
Asian	4	2.0	1	1.7
Black	20	10.1	9	15.0
Native American	2	1.0	0	0
Multiracial	5	2.5	4	6.7
Prefer not to state	4	2.0	0	0
Honors/AP Course				
Yes	138	69.3	39	65.0
No	61	30.7	21	35.0

Note. Participants ranged in age from 13 to 18 years old.

Table 3-2

Results of t-tests and Descriptive Statistics for Activity Involvement, Ethical Factors, Problem-solving Disposition, and Active and Engaged Citizenship by Long-term or Short-term Participation in 4-H Teen Leadership Programs (n =259)

Outcome	Group				95% CI for Mean Difference	<i>t</i>	df
	Long-term (<i>n</i> =199)		Short-term (<i>n</i> =60)				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Activity Involvement	22.05	6.72	22.20	6.26	[-2.07, 1.77]	-.15	260
EF Total	108.61	11.33	105.82	12.47	[-.57, 6.16]	1.64	260
EF Subscales							
Ethical Views	24.66	4.59	23.97	5.75	[-.73, 2.11]	.96	260
Unethical Views	48.75	6.74	47.73	7.91	[-1.02, 3.06]	.97	260
Behavior	35.20	5.67	34.12	5.56	[-553, 2.72]	1.30	260
Problem-solving	43.29	7.43	43.80	6.25	[-2.60, 1.57]	-.49	260
AEC Total	115.88	17.76	109.55	12.26	[1.50, 11.16]	2.58*	260
AEC Subscales							
Civic Duty	50.35	8.71	46.12	4.83	[1.92, 6.55]	3.60*	260
Civic Skills	20.06	5.35	19.72	4.67	[-1.17, 1.85]	.44	260
Connection	19.76	5.17	20.08	4.62	[-1.79, 1.14]	-.44	260
Civic Participation	21.65	4.62	21.82	4.02	[-1.47, 1.13]	-.26	260

Note. EF = Ethical Factors, * $p < .05$

The researcher employed a stepwise linear regression to examine the relationship between AEC and ethical factors (Table 3-3). The results of the regression for long-term 4-H teen-leadership members indicated that all three predictors explained 15.1% of the variance ($F(3,195) = 11.559, p < .001$). Ethical views ($\beta = .158, p < .05$), unethical views ($\beta = .269, p < .001$), and behavior ($\beta = .145, p < .05$) explained scores on the AEC scale. When examining the subscales of AEC, ethical factors explained variance in all four constructs: civic duty, civic skills, neighborhood connection, and civic participation. For youth in short-term 4-H teen-leadership programs, two predictors explained 20.3% of the variance ($F(2,57) = 7.249, p < .01$). It was found that ethical views significantly explained AEC scores ($\beta = .254, p < .05$), as did unethical views ($\beta = .185, p < .01$). Ethical factors also significantly explained civic duty scores and civic skills for participants in short-term programs.

Table 3-3

Relationship between Active and Engaged Citizenship (AEC) and Ethical Factors (n =259)

	Group					
	Long-term (n=199)			Short-term (n=60)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Model	50.210	11.427		72.771	10.168	
Ethical Views	.610	.273	.158*	.696	.254	.326*
Unethical Views	.710	.177	.269***	.421	.185	.272**
Behavior	.455	.217	.145*			
R ²	.151			.203		
F	11.559***			7.249**		

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 3-4

Relationship between Active and Engaged Citizenship (AEC) and Demographic Characteristics (n =259)

	Group					
	Long-term (n=199)			Short-term (n=60)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Model	95.910	4.300		93.627	5.515	
Activity Involvement	.689	.179	.261***	.717	.239	.366**
Honors/AP Courses	6.900	2.606	.180**			
R ²	.112			.134		
F	12.377***			8.988**		

Note. Gender, age, grade, race, and Hispanic/Latino ethnicity were excluded from the model based on a lack of significance to the model. * $p < .05$, ** $p < .01$, *** $p < .001$

To examine the relationship between AEC and demographic characteristics, the researcher conducted a stepwise regression (Table 3-4). The results for long-term 4-H teen-leadership program participants indicated that two predictors explained 11.2% of the variance ($F(2,196) = 12.377$, $p < .001$). Activity involvement ($\beta = .261$, $p < .001$) and taking honors/AP courses ($\beta = .180$, $p < .01$) significantly explained AEC scores. For participants in short-term programs, one predictor—activity involvement ($\beta = .366$, $p < .01$)—explained 13.4% of the variance ($F(1,58) = 8.988$, $p < .01$). Gender, age, grade, race, and Hispanic/Latino ethnicity were

excluded from the model and were not found to be predictors of AEC for either long-term or short-term 4-H teen-leadership program participants.

The researcher utilized a linear regression model to examine the relationship between AEC scores and problem-solving disposition (Table 3-5). Problem-solving disposition ($\beta = .530$, $p < .001$) explained 28.1% of the variance ($F(1,197) = 77.100$, $p < .001$) for 4-H teen leaders in long-term programs. For long-term program participants, problem-solving disposition explained variance for in all four subscales. For short-term 4-H teen-leadership programs, by problem-solving disposition ($\beta = .381$, $p < .01$) explained 14.5% of the variance in AEC scores ($F(1,58) = 9.830$, $p < .01$). For AEC subscales, problem-solving disposition explained variance in civic skills, respectively.

Table 3-5

Relationship between Active and Engaged Citizenship (AEC) and Problem-solving Disposition by Long-term or Short-term 4-H Teen Leadership Program (n =259)

	Group					
	Long-term (n=199)			Short-term (n=60)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Problem-solving Disposition	1.267	.144	.530***	.747	.238	.381**
R ²	.281			.145		
F	77.100***			9.830**		

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

To determine if ethical factors, demographics, and problem-solving disposition significantly impact AEC for youth participating in leadership-development programs, the researcher performed a stepwise linear regression (Table 3-6). The results of the regression indicated three predictors that explained 39.6% of the variance ($F(3,195)=42.611$, $p<.001$). It was found that ethical factors ($\beta = .296$, $p<.001$), problem-solving disposition ($\beta = .476$, $p<.001$), and taking honors/AP courses ($\beta = .140$, $p<.01$) explained AEC scores. Ethical factors and problem-solving disposition were also found to significantly explain civic duty, civic skills,

neighborhood connection, and civic participation for members of long-term 4-H teen-leadership programs. Gender, age, grade, race, Hispanic/Latino ethnicity, and activity involvement were excluded from the model and not found to be predictors of AEC for long-term program members.

For youth in short-term 4-H leadership programs, three predictors explained 39.0% of the variance ($F(3,56) = 11.937, p < .001$) for AEC scores. Ethical factors ($\beta = .404, p < .001$), problem-solving disposition ($\beta = .300, p < .01$), and activity involvement ($\beta = .281, p < .01$) significantly explained AEC scores. Gender, age, grade, race, Hispanic/Latino ethnicity, and enrollment in honors/AP courses were excluded from the model and not found to be predictors of AEC for short-term program participants. For AEC subscales, ethical factors explained civic duty; enrollment in honors/AP courses and ethical factors explained civic skills; activity involvement and problem-solving disposition explained neighborhood connection; and enrollment in honors/AP courses, activity involvement, ethical factors, and problem-solving disposition explained civic participation.

Table 3-6

Summary of Stepwise Regression Analyses for Variables Explaining 4-H Teen's in Long-term and Short-term Leadership Programs Active and Engaged Citizenship Scores (n =259)

	Group					
	Long-term (n=199)			Short-term (n=60)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Model	12.471	10.496		29.462	14.053	
Ethical Factors Total	.464	.089	.296***	.397	.103	.404***
Problem-solving Disposition	1.138	.135	.476***	.589	.210	.300**
Honors/AP Courses	5.388	2.158	.140**			
Activity Involvement				.550	.210	.281*
R ²	.396			.390		
F	42.611***			11.937***		

Note. Gender, age, grade, race, and Hispanic/Latino ethnicity were excluded from the model based on a lack of significance to the model. * $p < .05$, ** $p < .01$, *** $p < .001$

Discussion and Conclusions

Youth are often regarded as societal problems rather than viewed as those who can solve problems and assist as agents of change (Jones, 2009). By incorporating youth as leaders and partners in community-development efforts, communities can benefit through a diversity of ideas and views (Brennan, 2008). Conversely, youth participants also profit from involvement in community development and social change (Christens & Dolan, 2011). Youth leadership practitioners and scholars can provide better training programs to prepare youth for civic engagement by examining the relationships among a variety of factors including problem-solving disposition and ethical views, and active and engaged citizenship.

Overall, there were minimal differences between 4-H teen's in long-term or year-round leadership programs when compared with 4-H teens participating in short-term leadership trainings. Notably, those in long-term programs had significantly higher mean scores for the civic duty subscale and AEC, but there were no significant differences for civic skills, neighborhood connection, or civic participation. Lerner et al. (2013) supported the idea that 4-H members are more likely to contribute and engage civically than are non-4-H members. The assumption that participation in long-term 4-H teen-leadership programs would increase AEC was not supported in this study, indicating that amount of treatment had minimal effects on three of the four factors related to AEC.

Additionally, there were no differences between level of activity involvement, ethical factors, or problem-solving disposition in youth involved in long-term or short-term leadership development. This indicates that long-term teen-leadership programs in Virginia 4-H do not have a stronger impact on an individual's character strengths or problem-solving views, attitudes, and beliefs. Although activity involvement was a predictor in the demographics model for both long-

term and short-term program participants, it was only a significant predictor for participants in short-term leadership programs in the overall model. This could indicate that other activity involvement outside of 4-H is providing these youth with opportunities to increase their leadership skills, character strengths, and problem-solving views. Recall, the impact of extracurricular activities on youth varies based on the type of program, level of involvement, and program structure (Roth & Brooks-Gunn, 2016), but the key to benefits and protective factors through involvement is based on positive and supportive relationships with adults and peers (Burton & Marshall, 2005). Although not examined in this study, future considerations for youth's perceptions of activity involvement could provide further insight into this phenomenon.

Participation in honors or AP courses also served as a significant indicator for increased AEC scores for participants in long-term 4-H teen-leadership programs. Terry, Bohnenberger, Renzulli, Cramond, and Sisk (2008) suggested that classes and programs for gifted youth often incorporate opportunities for the development of problem-solving skills and the creation of action plans around community issues. Because 4-H citizenship initiatives focus on heightening youth's capacity for community engagement (4-H National Headquarters, 2011), participants in long-term 4-H teen-leadership programs may be receiving more opportunities to apply the skill set learned within honors and AP courses through leadership.

Ethical factors and problem-solving disposition explained increased levels of AEC for both groups of youth. Increasing incorporation of character education and opportunities for problem-solving may be a pathway for boosting youth's engagement in their communities. Views on ethical and unethical concepts explained AEC scores in all youth participants. These views are related to an individual's character: capability to lead the life of a moral human (Berkowitz & Bier, 2005). Character is formed developmentally throughout life (Berkowitz,

2002), but intentional and systematic character education is ideal during developmental stages (Greenberg et al., 2003). A recent meta-analysis by Jeynes (2017) supported character education as an avenue for benefitting youth academically and behaviorally and also for strengthening communities. An issue with character education is that it can be a controversial topic because of fears that cultural variation is not being taken into consideration and that educators' personal views are being placed on the youth (Jeynes, 2017). However, effective character education programs should be intentional, proactive, comprehensive, and focused on core values (Lickona, Schaps, & Lewis, 2002) such as honesty, trust, respect, and responsibility.

Additionally, problem-solving disposition explained increased levels of AEC. Problem-solving disposition is related to views, attitudes, and beliefs and capabilities for partaking in problem solving. Related to reasoned action approach disposition can be related to intention and predict the likelihood of an individual to partake in a specific action (Fishbein & Ajzen, 2010). Performance virtues, which are related to character, are motivated by a desire to solve a complex problem (Baehr, 2017). Therefore, youth with a higher affinity toward problem-solving and belief in their abilities to be successful are more likely to participate as active and engaged citizens. In Redmond and Dolan's (2016) conceptual model of youth-leadership development, the action level involves solving problems and utilizing leadership skills to affect change and contribute to society.

This study provides implications for continued examination of how problem-solving disposition and character virtues impact youth's AEC levels and their capabilities to engage in community change efforts. Based on the conceptual model, select demographic characteristics had an impact on participants, while ethical factors and problem-solving disposition both explained AEC for both short-term and long-term participants in 4-H teen leadership programs.

Communities should consider youth as potential opportunities for strengthening their community rather than regarding youth as future leaders. Building intentional youth leadership programs provides avenues for growth and preparedness so youth can become current leaders in society.

Recommendations

Based on the results, there are several recommendations for future research and practice. With citizenship as a priority in 4-H (National 4-H Headquarters, 2011), the first recommendation is to place a higher priority on character education and problem solving in 4-H teen-leadership programs in Virginia. Both problem-solving disposition and ethical factors demonstrated a significant impact on youth's AEC scores, but there was no difference between the youth in short-term or long-term teen-leadership programs. This could provide insights on opportunities for 4-H Extension agents to increase intentionality and inclusion in their programs. Redmond and Dolan (2016) brought attention to a shift in youth's views on leadership to be more collaborative and relational in nature. However, current goals of Virginia 4-H teen-leadership programs are centralized around the development of self and skills for the future (Price & Elmer, 2015).

By intertwining the 4-H Citizenship program with teen-leadership initiatives, Extension agents can provide youth with opportunities to transfer and utilize their leadership skills in their communities. Optimal leadership-development programs are intentional and focused on not only providing knowledge but also pairing that knowledge with opportunities to incorporate learned skills in a larger context (Bean et al., 2017). Conner and Strobel (2007) propose that leadership programs be comprised of communication and interpersonal skills, analytic and critical reflection, and positive community involvement in order to avoid the creation of a one-size-fits-all understanding of leadership practices. The promotion of communication and interpersonal

skills can be harnessed through the development of group membership and the incorporation of collaborative processes. Further, community involvement opportunities provide youth with a greater understanding of their own leadership capacity (Hancock, Dyk, & Jones, 2012).

It is recommended that youth-leadership practitioners who are facilitating long-term youth-leadership programs consider incorporating opportunities for problem-solving experiences through a scaffolding approach that infuses theory. In this practice, curriculum would be infused with character education, PYD, leadership-skill development, and problem-solving experiences. Collaborative activities for exploring community-based issues and opportunities for practicing problem solving intergenerationally would prepare youth to be agents of change rather than future leaders (Christens & Dolan, 2011). The opportunities for youth participation in community-change efforts would bolster their community's growth and diversify teams charged with providing viable solutions to community-based issues.

Extension professionals for Virginia 4-H should examine their programming goals and objectives for both long-term and short-term leadership programs. If character and problem-solving are not included in their objectives, these elements should be incorporated to increase AEC, which is a high priority of 4-H program development (4-H National Headquarters, 2011). Additionally, youth curriculum and professional trainings should be developed for Extension agents to advance their programs and increase their participants' likelihood to contribute to their communities. This curriculum should include ways to scaffold opportunities and provide flexibility for problem-solving experiences to focus on local community issues.

Finally, it is recommended that future research both expand the population to youth outside the 4-H organization and examine how problem-solving disposition impacts success in collaborative problem-solving partnerships between youth and adults. 4-H members are more

likely to contribute and engage civically than are non-4-H members (Lerner et al., 2013). Therefore, the population in this study did not allow for a great deal of generalizability for youth outside of the 4-H program. Future research efforts should expand the population and examine differences in models between youth not enrolled in a 4-H program to compare 4-H members and nonmembers with attention to those enrolled in honors/AP courses. Additionally, it can be concluded that problem-solving disposition and ethical factors impact the level of AEC for participants in 4-H teen-leadership programs in Virginia. Future research should focus on how perceived success in the problem-solving process at the community level is impacted by problem-solving disposition, ethical factors, and AEC levels.

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CHAPTER 4

MANUSCRIPT #2

Profiles of Youth Citizenship: A Cluster Analysis of Ethical factors, Demographics, and Problem-solving Experiences

Youth have the capacity to drive positive change in their communities through active and engaged citizenship (AEC). Teen-leadership programs provide youth with opportunities to develop the skills necessary to participate as partners in community problem-solving efforts. Situated in relational developmental systems metatheory, this study aimed to examine how cluster membership based upon demographic characteristics, ethical factors, and problem-solving disposition impacted AEC. The findings indicated significant differences between clusters for AEC, civic duty, and civic skills. These differences were predominately observed through membership in long-term or short-term leadership programs, gender, enrollment in honors/AP courses, ethical views, and problem-solving disposition. Youth leadership practitioners should consider avenues for infusing problem-solving and character development in gender inclusive program curriculum to increase likelihood for contributing.

Introduction

From an interactional lens, community is a dynamic, changing environment built on the actions of its members rather than a stagnant, geographically bound area (Barnett & Brennan, 2006). From this perspective, individuals are impacted by their community and context. Conversely, individuals influence their communities, whether intentionally or unintentionally (Lerner, Almerigi, Theokas, & Lerner, 2005). Community development initiatives rarely build on the strengths of youth or allow youth participation to contribute to community viability. However, youth have the capacity to develop healthier communities with longevity (Checkoway & Gutierrez, 2006). Society, their community, and the individual are all positively impacted

when youth are actively engaged within their communities (Zaff, Boyd, Li, Lerner, & Lerner, 2010). Increasing youth capacity for active and engaged citizenship benefits youth participants, their communities, and greater society.

Good citizenship is difficult to define and measure, but active civic participation and moral and political motivations provide evidence of individual citizenship (Taylor & Marri, 2013). Civic participation can be divided into three domains: voting behavior, helping in the community, and making one's voice heard (Haste & Hogan, 2006). Partaking in all three domains is beneficial both to the individual and to their community. In a digital world, individuals exercise civic action through online and traditional civic activities. Mihailidis and Thevenin (2013) posit:

Citizens with the capacities to participate, collaborate, and express online stand a better chance to become critical thinkers, creators and communicators, and agents of social change: helping to empower civic voices for the future of sustainable, tolerant, and participatory democracy in the digital age (1618-1619).

Therefore, when analyzing youth citizenship, we must consider how youth interact with their communities and society both online and through face-to-face.

When considering youth's civic participation and citizenship, individuals often view these concepts in two distinct ways (Bell, 2005). The first approach involves youth's need to develop skills to become future citizens. The other approach includes examining youth's views and insights on their current roles as citizens. Recent research supports youth's role as active community members that drive change (Harris, 2015; Mortensen et al., 2014). Mortensen et al. (2014) argue that youth have the awareness and desire needed to create meaningful change within their communities while Harris (2015) supports youth's role in collaborative community

problem-solving. Youth are capable of meaningful contributions, but they must possess the skills and motive necessary to be successful in these endeavors.

In a positive youth development (PYD) framework, youth are able to contribute when they are “thriving” (Larson, 2000). Youth thrive when they have competence, confidence, connection, character, and caring (Zarrett & Lerner, 2008), which reduces negative, risky behaviors (Shek & Sun, 2015). These negative behaviors are reduced because flourishing youth often engage in contributions to their families, communities, self, and overall society (Lerner, Dowling, & Anderson, 2003). With this in mind, youth engaged in programs and settings that promote PYD develop the necessary skills to become contributing citizens.

Teen Leadership

Leadership must be considered a social process that begins very early in life, in which successful people develop skills to understand how to interact with and lead others (van Linden & Fertman, 1998). Further, one’s experiences throughout life influence how they interact with others and view the world. With this in mind, leadership is a developmental process throughout a person’s life span (Hanks et al., 2015). Youth-leadership development programs, however, need to be designed to respond to the demands of adolescence and must differ from those established for adult learners.

Youth leadership can be defined as, “involvement of youth in responsible, challenging action that meets genuine needs, with opportunities for planning and decision making” (Kress, 2006, p. 51). Additionally, Komives and Dugan (2010) noted a shift in youth’s perceptions of leadership to include a more collaborative and reciprocal approach. Within this approach, inclusion and power dynamics came to the forefront with listening, role modeling, and helping others as key actions defining leadership (Komives & Dugan, 2010). In another study conducted

by Mortensen et al. (2014), youth stated, “leadership is (a) available to anyone in any context, and involves (b) creating change, (c) collective action, (d) modeling and mentoring, and (e) a strong character” (p. 453). By building leadership programs with youth’s centralized views and definitions of leadership, practitioners can increase youth’s engagement and motive to participate and take on leadership roles.

Because the development and implementation of programs occurred prior to a solid basis of research and theory, the broad views of what constitutes youth leadership is still a prominent issue in the field (Conner & Strobel, 2007; Klau, 2006). This poses an issue because youth professionals often consider ice-breakers, short-term training, team-building activities, and extracurricular involvement as constituting youth leadership (Klau, 2006). However, van Linden and Fertman (1998) emphasize the importance of three distinct stages for youth-leadership development: awareness, interaction, and mastery. Ricketts and Rudd (2002) expanded upon this theory to include comprehension, analysis, application, synthesis, and evaluation. Namely, youth leadership programming varies from other development initiatives by providing avenues for: planning, decision-making, and autonomy over their programs; frequent interactions with adults who provide support and are positive role models to participants; and opportunities to develop life skills (Anderson, Sabatelli, & Trachtenberg, 2007).

4-H teen leadership. Formed in the early 1900s, 4-H is one of the longest-running youth organizations in the United States, with a focus on providing safe and supportive environments for youth development (National 4-H Council, 2017). Contribution to the community is often viewed as the ultimate intended outcome for youth participants. However, there are several elements required to practice PYD and contribution: positive relationship with caring adults, a safe and inclusive environment, engagement in learning, opportunity for mastery, opportunity to

see oneself as an active participant in the future, opportunity for self-determination, and opportunity to value and practice service for others (4-H National Headquarters, 2011).

Leadership is often related to contribution and citizenship within 4-H programs, with leadership efforts including club-based, county-based, and statewide leadership-training programs and positions. In Virginia, 4-H leadership programs vary, with some counties supporting year-round teen-leadership clubs and others instituting short-term trainings. At the state level, opportunities include positions within the state 4-H cabinet with year-round trainings and short-term initiatives, such as state congress and the 4-H day at the capital.

Purpose & Objectives

To analyze how 4-H leadership programs impact the development of active and engaged citizens, one must consider the bidirectional relationship between individuals and context. Relational developmental systems (RDS) metatheory posits that adaptive developmental regulations are mutually influential relations between person and context and impact the development of active and engaged citizens (Zaff et al., 2010). AEC provides a model for examining behavioral, cognitive, and socioemotional constructs associated with youth citizenship development (Zaff et al., 2010). Lerner et al. (2014) emphasizes that ecological assets, strengths of adolescents, PYD, and risk/problem behaviors all impact active and engaged citizenship. Problem-solving disposition is not specifically examined through this model. Positive problem-solving disposition may provide insight on youth's preparedness to engage in collaborative community problem solving based on the relationship between perceptions of competence and self-determination. When youth are able to accomplish tasks within their realm of ability, they experience heightened enjoyment, competence, and self-determination (Wiess, 2011). Therefore, to establish a model for developing active and engaged citizens prepared to act

as change agents within their community, we must explore youth profiles of citizenship to understand the makeup of young active and engaged citizens.

The purpose of this study was to utilize person-centered analysis to develop youth profiles of citizenship. The researcher assessed statistical significance between clusters and active and engaged citizenship. Are there youth profiles of active and engaged citizenship based on ethical factors, demographics, and problem-solving disposition for youth participating in a teen-leadership program?

1. Describe active and engaged citizenship, ethical factors, demographic characteristics, and problem-solving disposition.
2. Identify clusters of participants based on ethical factors, demographic characteristics, and problem-solving disposition.
3. Examine relationships between active and engaged citizenship and clusters based on ethical factors, demographic variable, and problem-solving disposition.

Theoretical Framework

From a relational developmental systems (RDS) view point, youth are regarded from a strength-based perspective as resources to be developed (Geldhof, Bower, & Lerner, 2013). Examining trajectories toward active and engaged citizenship enables a greater understanding of the mutually-influential person-context relations involved within RDS (Zaff, Kawashima-Ginsberg, Lin, Lamb, Balsano, & Lerner, 2011). Therefore, the theoretical foundation for this study is centralized on RDS metatheory and the role of sociocultural theory and reasoned action approach.

Relational Developmental Systems

Within developmental science, understanding how humans thrive through mutually-influential relations between individual contributions, positive community engagement, and community organizations is a focal area of work (Lerner et al., 2014). RDS metatheory provides a basis for examining these phenomena from “a life-span approach to the scientific study of systematic intraindividual changes—from conception to the end of life—of an organism’s behavior, and of the systems and processes involved in those changes and that behavior” (Overton, 2015, p. 47). Within RDS, a reciprocal bi-directional or circular relationship exists between the individual and their context, which incorporates both inter- and intra-individual change (Overton, 2013). Plasticity is a hallmark of this metatheory and encompasses the capacity for development to be systematic and continuous rather than random (Lerner & Overton, 2008). The organism is inherently active, self-creating, self-organizing, and self-regulating in nature within a plastic, nonlinear complex adaptive system (Overton, 2015). The organism’s actions function coactively with the physical and sociocultural environment it inhabits.

Within systematically integrated human development, when the bi-directional relations are mutually beneficial, a foundation for adaption throughout the lifespan arises through levels of organization (Lerner et al., 2014). Adaption within RDS is how the person responds to changing contexts (Overton, 2013). RDS examines developmental processes as non-ergodic and does not assume homogeneity across samples or stationarity across time (Lerner et al., 2014). With this approach, individual strengths are aligned with environmental resources for positive growth, and youth development may be optimized (Geldhof et al., 2013), resulting in applied empirical work for positive human development and social justice (Lerner & Overton, 2008). Furthering expansive holistic yields of inclusive inter- and intra-individual patterns for responding to “what”

questions within programmatic research (Lerner et al., 2014) such as, what context, for what youth, at what developmental period, results in what features of community problem-solving?

Traditional developmental science was derived from the principles of the Cartesian-split mechanism paradigm, which argued that mind and body were separate in existence (Overton, 2013). With this system, unidirectional linearity is applied through explanations of cause-effect sequences (Overton & Reese, 1973). Within a relationism worldview and an RDS paradigm, Cartesian-split metatheory is omitted through an epistemology, which rejects a “nothing but” splitting view and promotes inclusivity through holism. With holism, complexity is organized in a system of parts, which are unable to be context-free (Overton, 2013). Therefore, with inquiry, it is essential to consider the following principles: identity of opposites, opposites of identity, and synthesis of wholes (Overton, 2013).

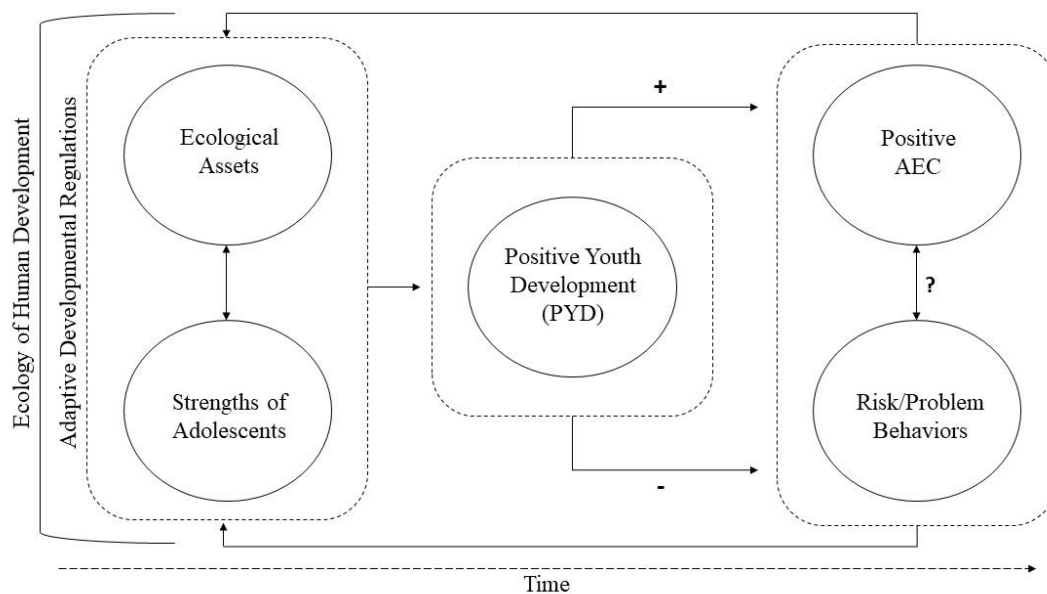


Figure 4-1. Adapted from Lerner et al.’s (2014) model for active and engaged citizenship of youth.

Further, RDS integrates six necessary defining features: (1) organization of processes, (2) embodiment, (3) order and sequence, (4) direction, (5) epigenesis and emergence, and (6) relative permanence and irreversibility (Overton, 2015). The RDS organizes and regulates itself through coactions with biological, sociocultural, and physical environmental subsystems (Overton, 2015). Embodiment involves one's body as a lived experience, which interacts with a world of sociocultural and physical objects. Order and sequence is contingent in nature but is based on a universal sequence within the complex living system (Overton, 2015). Directionality suggests orientation toward an end state, which implies unidirectionality. However, there are multiple action paths through a normative sequence (Overton, 2015). The system is situated within a specific context through epigenesis, with emerging system novelty for an increase in complexity. Finally, transformational change within the system is relatively permanent and irreversible (Overton, 2015).

RDS metatheory transposes the independence of each individual's developmental trajectory from any other human. All human beings embody actions, which are characteristics of their complex adaptive system. Human actions are viewed as intentional activities, with intentionality either being conscious or self-conscious, not requiring a level of knowing (Overton, 2013). Therefore, all embodied actions are a product of the person, biology, and culture. Actions are impacted by adaptive developmental regulations, which are mutually influential relations between the individual the context (Geldhof et al., 2013). Adaptive developmental regulations may emerge and/or advance within an individual and their environment to increase the likelihood of positive development. In the model for active and engaged citizenship of youth (Figure 4-1), "adaptive developmental regulations lead to positive youth development and, within the context of the broader ecology of human development, in turn

lead to positive civic engagement and reduced risk and problem behaviors” (Lerner et al., 2014, p. 73). This developmental trajectory presents an example of a predicted developmental process, which incorporates adaptive developmental regulations to enhance the probability of contribution. Within RDS, probabilities can be assessed through normative sequences with multiple action paths and courtesy to biological, sociocultural, and physical environmental subsystems.

Sociocultural Theory

At the basis of RDS metatheory are the mutually influential relationships between biology, person, and culture (Overton, 2015). Further, Overton (2013) posits:

In the area of sociocultural development, there appears to be a clear trend away from positions that identify individual development and culture as separate and distinct, if interacting, entities, and towards the position that recognizes their coconstruction, codetermination and codevelopment (p. 94).

RDS concepts are tools for social justice that establish theory-predicted and evidence-based policies and programs, which drive positive change and development for all youth (Lerner & Overton, 2008). Sociocultural theory provides a basis for understanding the impact that culture and environment have on human development.

Sociocultural theory is derived from social cognitive theory, which simplistically represents the social learning system as one acquires patterns of actions and behaviors through experiences and observations (Bandura, 1971). Social cognitive theory is centralized around the concept that behavior is dynamic and reliant on personal and environmental factors, which simultaneously influence one another (Holtzapple et al., 2011). Within social cognitive theory, self-regulation and self-influence are determined by the self-monitoring of effects, judgement of

contextual circumstances, and affective self-reaction (Bandura, 1991). At the core of social cognitive theory, all individuals essentially partake in symbolizing, forethought, vicarious learning, self-regulation, and self-reflection (Stajkovic & Luthans, 2003). Personal agency is also developed through intentional actions, also called predicted or future actions (Bandura, 2001).

Vygotsky's (1978) sociocultural theory posits individuals derive meaning of their experiences through social mediation, which is situated within culture and history. Social interaction through one's developmental history influences symbolism and culture (Mahn, 1999). Three central elements of sociocultural theory are social sources of individual development, semiotic mediation in development, and genetic analysis (John-Steiner & Mahn, 1996), meaning that, as one grows, learning occurs based on genetics, symbols, and social interactions (Mercer & Howe, 2012). This results in the development of one's cultural associations.

One's culture is collective, emotional, historical, symbolic, dynamic, and fuzzy. Cultures are collective because they are not created by an individual alone, but rather require a shared perspective. Cultures become emotional when anxieties are managed by one's rationale within their background (Alfred, 2002). Practical and technical sides of human interaction are accentuated through the symbolism of culture (Alfred, 2002). Views on culture are embedded in historical premises. Therefore, individuals are unable to disassociate from their histories. These historical perspectives are invasive but not static, and they lead to the dynamic view of culture. Finally, cultures are viewed as fuzzy because "cultures are not monolithic, single sets of ideas, but are instead pluralistic and incorporate contradictions, ambiguities, paradoxes, and just plain confusion" (Alfred, 2002, p. 6). Therefore, partaking in reflection processes enable individuals to understand how they interpret who they are in association to others.

As active and engaged citizens, personal culture and history of social experiences has impact on developmental trajectories. Youth are not homogeneous citizens; they all have different lived experiences of citizenship (Bell, 2005). Parental and community views of civic participation and one's self-efficacy relating to participation in problem-solving opportunities impact youth in different ways but should be taken into consideration. For example, Taylor and Marri (2013) found that identity, family, movement, school curricula, and community engagement all impacted immigrant youth's conceptualization of citizenship. These factors varied in their impact on developmental pathways toward engaged citizens (Taylor & Marri, 2013). This is important to consider when envisioning an optimized developmental process to contribute to active and engaged young citizens.

Reasoned Action Approach

Derived from Bandura's (1971) social cognitive theory, reasoned action approach provides a basis for understanding how individuals decide to engage in specific behaviors (Fishbein & Ajzen, 2010). Reasoned action approach involves consideration for how background factors impact beliefs, which ultimately drive the formation of one's attitudes, perceived norms, and perceived behavioral control. These all ultimately impact intention, which leads to a behavior as displayed in Figure 4-2. (Fishbein & Ajzen, 2010).

Behavioral, normative, and control beliefs are the three types of beliefs involved with reasoned action approach. Behavioral beliefs are based on one's predictions of the consequences or benefits they may reap from performing the behavior. Behavioral beliefs impact one's attitude toward personally performing the behavior based on their concerns for positive or negative consequences (Fishbein & Ajzen, 2010). Normative beliefs are based on one's assessment of whether others approve or disapprove of the behavior. Normative beliefs produce perceived

norms, which are social pressures and conceived social responses from partaking in the behavior (Fishbein & Ajzen, 2010). Control beliefs are formed around the environmental and personal factors that aid or impede one's ability to carry out the behavior (Fishbein & Ajzen, 2010). Control beliefs result in one's behavioral control and sense of self-efficacy (Fishbein & Ajzen, 2010).

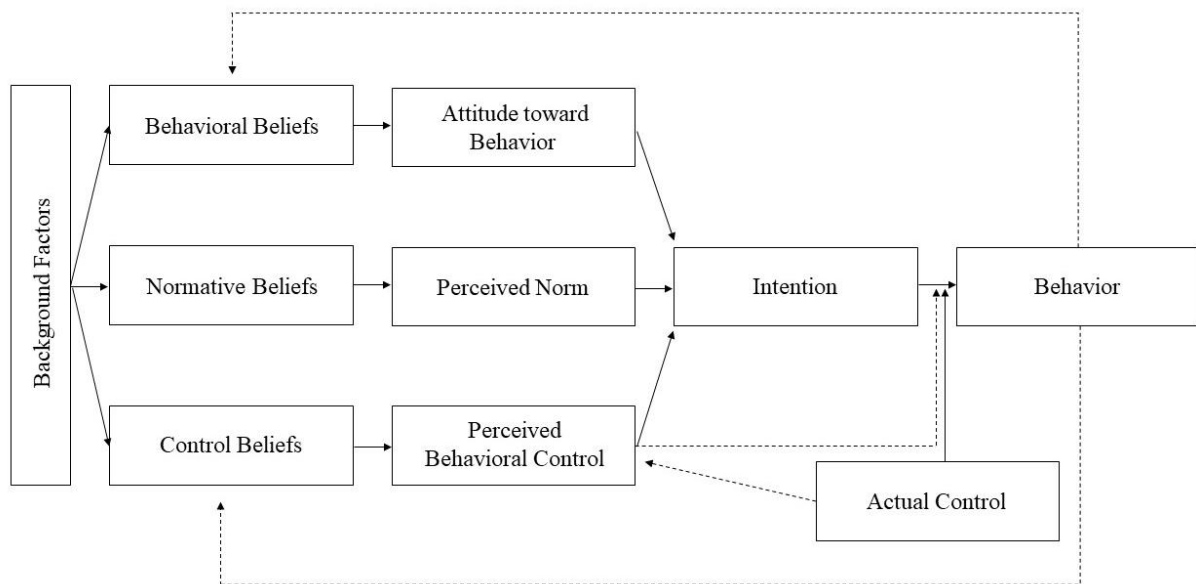


Figure 4-2. Adapted from Fishbein & Ajzen's (2010) reasoned action approach model.

Personal attitudes, perceived norms, and perceived behavioral control guide intentions and behavior (Fishbein & Ajzen, 2010). Behavioral intention, within reasoned action approach, is one's readiness to perform the behavior (Fishbein & Ajzen, 2010). Behavioral intentions are the best predictors of behavior, but actual control based on skills, abilities, and environmental factors must also be considered. The greater the attitudes, perceived norms, and perceived behavioral control, the higher intentions are and the greater the likelihood is that they will partake in the behavior. However, background factors also contribute to beliefs and overall behavioral outcomes. Fishbein and Ajzen (2010) postulate:

A multitude of variables could potentially influence the beliefs people hold: age, gender, ethnicity, socioeconomic status, education, nationality, religious affiliation, personality, mood, emotion, general attitudes and values, intelligence, group membership, past experiences, exposure to values, intelligence, group membership, past experiences, exposure to information, social support, and coping skills (p. 24).

These background factors are acknowledged but difficult to attribute without consideration to other theories. RDS metatheory and sociocultural theory provide a basis for consideration and examination.

Consistent with RDS metatheory, reasoned action approach provides a framework to understand how humans engage in actions with regard to background factors. Within reasoned action approach, Fishbein and Ajzen (2010) agree that all individuals have different explanations and paths for how their background factors impact their intentions and behaviors. However, reasoned action approach suggests that background factors are difficult to attribute to responses and must be complemented with others to examine their impact on the reasoned action approach (Fishbein & Azjen, 2010). Connecting reasoned action approach with sociocultural theory under RDS metatheory provides a basis for examining normative sequences within youth behavioral development. The framework creates a basis for examining the impact of background factors and adaptive developmental regulations on developmental trajectories for active and engaged young citizens.

Conceptual Framework

Demographics, ethical factors, and problem-solving disposition from RDS metatheory can be utilized to develop youth profiles for active and engaged citizenship. Active and engaged citizenship is often operationalized as “someone who has a sense of civic duty, feeling of social

connection to their community, confidence in their abilities to effect change, as well as someone who engages in civic behaviors” (Zaff et al., 2010, p. 737). In active and engaged citizenship, civic action, civic skills, social connection, and duty serve as constructs. This perspective views active and engaged citizens as those who are more than just “dutiful” citizens who partake in activities such as voting, obeying laws, paying taxes, and upholding community standards (Mihailidis & Thevenin, 2013). Rather, active and engaged citizens meaningfully contribute to their communities.

Demographics Variables

Because youth are a heterogeneous group with a variety of personal and contextual experiences, they all contribute and view their contributions toward their communities differently (Bell, 2005; Mihailidis & Thevenin, 2013). To examine these personal and contextual experiences, one must examine youth profiles utilizing demographics such as activity participation, gender, race, and ethnicity. Certain demographic characteristics are considered protective factors. Protective factors are inputs that encourage prosocial behaviors and reduce the risk of youth partaking in antisocial behaviors (Biggar, Forsyth, Chen, & Richard, 2016; Burton & Marshall, 2005). Individual, family, or community-based factors act as protective factors. However, these protective factors are contextually historical, social, and cultural (Crockett & Crouter, 1995). Therefore, examining demographics provides an avenue for developing profiles.

Involvement in extracurricular activities and youth organizations often serves as protective factors for a range of deviant behaviors and increases a sense of psychological well-being (Agans, Champine, DeSouza, Mueller, Johnson, & Lerner, 2013; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Feldman & Matjasko, 2005; Kahne et al., 2001). Zaff et al.’s (2010) model of active and engaged citizenship views the connection to community as a large

contributor to one's affinity toward citizenship participation, deeming community activity participation an important factor when examining youth profiles based on environmental and contextual impacts.

Ethical Factors

Character strengths have the capacity to impact a person's view of their ability to develop into active and engaged citizens (Hilliard et al., 2014). Character strengths from this point of view involve one's attitudes, beliefs, and values, which affect the view of their role within the community. Character strengths are derived from four distinct virtues: moral, civic, intellectual, and performance (Baehr, 2017; Shields, 2011). Individuals with moral virtues demonstrate compassion, kindness, and empathy for others through a drive to help out their neighbors (Roberts & Wood, 2007). Civic virtues move past an individual aiding another in need and include a desire to impact society overall. Civic virtues often include tolerance, civility, and inclusion (Baehr, 2017). When a person desires to gain knowledge and truth related to civic endeavors, they have intellectual virtues such as curiosity and intellectual courage (Baehr, 2017). Finally, performance virtues, can double as a moral, civic, or intellectual virtue as well as a virtue in and of itself (Baehr, 2017). Performance virtues are those that are not motivated by the need of another individual or society as a whole but by a need to work on complex and challenging problems (Baehr, 2017). It is known that virtues impact citizenship, but little is known about how these virtues or ethical factors interact with one another or with an individual's environment and context in order to impact active and engaged citizenship.

Problem-solving Disposition

With an increasing number of wicked problems, it is essential to ensure teams are diverse to effectively provide viable solutions. Grint (2005) posits that wicked problems as complex

issues with no right or wrong answer, but with various alternatives. Therefore, communities must ensure that all members are equally represented and engaged while providing various solutions to wicked problems. Youth are not often included in the problem-solving process but have the capacity to play a significant role in collaborative problem-solving teams (Harris, 2015).

Brennan (2008) postulated that “youth bring new ideas, resources, enthusiasm, and serve as the basis for long-term sustainable community development efforts” (p. 56). By not including youth in the problem-solving process, communities are excluding valuable contributors.

However, it is essential to consider youth’s preparedness and willingness to engage as equals in the problem-solving process. Teen-leadership programs often consider problem-solving skills a priority for development (Brungardt, 1996). Problem-solving skills involve the ability to think creatively in order to create multiple solutions for social and cognitive problems (Zolkoski & Bullock, 2012). These skills are essential and can be developed over time. However, for youth to fully participate as equal partners they must also possess a positive disposition toward problem solving.

Problem-solving disposition is an individual’s intention to engage in the behavior. In reasoned action approach, positive perceived norms, attitude toward the behavior, and perceived behavioral control influence intention to engage in a behavior (Fishbein & Azjen, 2010).

Intention—readiness and attitudes towards the behavior—is the best predictor of an individual’s likelihood to engage in the behavior. Individuals with a higher problem-solving disposition or views, attitudes, and beliefs of their competencies to participate as problem solvers are more likely to participate in the problem-solving process.

Problem-solving disposition is related to with performance virtues based on the desire to solve complex and challenging problems (Baehr, 2017). Examining problem-solving disposition

could provide greater insight into how youth engage with their communities by understanding their attitudes, views, and beliefs on their problem-solving abilities. Since problem solving is a part of everyday life (Kirton, 2011) and youth are continually developing their own identities, their views on their own role and capacity for problem solving could provide a great deal of insight into an individual's likelihood to participate as an active and engaged citizen. Further, examining problem-solving disposition in combination with demographic characteristics and ethical factors to develop youth profiles could provide a great deal of insight into youth development and their engagement in citizenship activities.

Hypothesis

The hypothesis tested in this study is that, if ethical factors and problem-solving disposition are increased, active and engaged citizenship will be optimized. However, it is difficult to estimate how demographic characteristics will impact the model. The second hypothesis is that youth participating in 4-H teen-leadership programs are heterogeneous in active and engaged citizenship based on varying demographics, ethical factors, and problem-solving disposition and that profiles for active and engaged citizenship exist. In other words, youth active and engaged citizenship will vary based on differences in demographics, ethical factors, and problem-solving disposition.

Methods

This study explored developmental trajectories of youth toward active and engaged citizenship. This study examined how ethical factors, demographics, and problem-solving disposition impact developmental trajectories for active and engaged citizenship through a person-centered approach. A person-centered approach can take multiple forms and is not an all-inclusive statistical method. However, it does provide further consideration for intraindividual

change and the diverse pathways of development. “The person-centered approach is grounded in systems perspective of holistic organization of interactive factors and is particularly suited for studying the complex organization of multiple characteristics within the individual” (Lau & Roeser, 2008, p. 497). A person-centered approach examines how clusters of variables impact behavioral responses (Bates, 2000). Person-centered approaches view the population as a heterogeneous group who are influenced by different variables to a diverse extent at various points in time (Laursen & Hoff, 2006).

Research Design

The research design for this study was a non-experimental, ex post facto survey design (Ary, Jacobs, Irvine, & Walker, 2018). The researcher chose the ex post facto survey design because participants had already received a character education program and because the design allowed for the surveying of participants in a realistic setting. All respondents were participants in a 4-H teen-leadership program or training in the state of Virginia. There were variations in the treatment received based on length of time and program/training facilitator. Youth were enrolled in a year-round teen-leadership club or in a short-term leadership program. Results from this study are only generalizable to 4-H teen leaders in Virginia, based on limitations in an ex post facto design (Ary et al., 2018).

Sample

All youth, ages 13-19, participating in teen-leadership programs run through Virginia Cooperative Extension (VCE) served as the population for this study. The researcher directly administered the instruments face-to-face on scheduled dates and times at club meetings and weekend-long trainings. The VCE 4-H state extension specialist for 4-H youth development identified 14 counties with strong, year-round teen-leadership programs. The researcher

contacted each county extension agent to recruit participants and to schedule a time data collection. Out of the 14 counties, the researcher collected data from 11 counties. From the 11 counties there were 275 potential participants with 199 completing the survey for a response rate of 72.36%. The researcher also contacted 14 additional extension agents to recruit counties with upcoming camp-counselor trainings which incorporated teen-leadership training. From the 14 additional counties, the researcher scheduled collection dates with nine counties. From the nine counties, there were 95 potential participants with 60 responding for a response rate of 63.16%. From both groups there was an overall response rate of 70%. The county agents disseminated Institutional Review Board (IRB) guardian consent, youth assent forms, and recruitment materials to youth participants a week prior to data collection. Obtaining guardian consent was a limitation in this study. Participants without guardian consent were often willing to participate, but unable to do so based upon ethical considerations and IRB requirements to obtain consent from guardians which reduced response rates. The survey took approximately 30 minutes for each youth to complete.

Long-term teen-leadership program demographics. Youth from long-term teen-leadership programs were majority female ($n = 133$, 66.8%) and enrolled in honors/AP courses ($n = 138$, 69.3%). From the participants, 82.4% were white ($n = 164$), 10.1% black ($n = 20$), 2.5% multiracial ($n = 5$), 2% Asian ($n = 4$), 1% Native American ($n = 2$), and 2% selected to not state their race. The mean age of participants was 15.42 ($SD = 1.35$).

Short-term teen-leadership program demographics. Participants from short-term teen-leadership programs were predominately female ($n = 42$, 71.7%). Of the youth, 76.7% were white ($n = 46$), 15% black ($n = 9$), 6.7% multiracial ($n = 4$), and 1.7% Asian ($n = 1$). The mean age of participants was 14.78 ($SD = 1.26$) and 65% were enrolled in honors/AP courses ($n = 39$).

Instrumentation

To measure Active and Engaged Citizenship (AEC), the researcher utilized a previously established instrument by Bobek, Zaff, Li, and Lerner (2009). The 32-item AEC scale was adapted to incorporate social media as a means for outreach and advocacy. The AEC scale examines behaviors and attitudes toward citizenship, including emotional, cognitive, and behavioral components of citizenship (Bobek et al., 2009). Participants responded to 28 items on a 5-point Likert scale and 3 questions regarding amount of participation on a 6-point Likert scale (from 1 = “Never” to 6 = “Every day”). Scores on the scale could range from 32 to 163. The AEC scale has four factors: civic duty ($\alpha = .741$), civic skills ($\alpha = .812$), neighborhood connection ($\alpha = .766$) and civic participation ($\alpha = .609$). The reliability for civic participation in this study was questionable, but a previous study Bobek et al. (2009) reported an acceptable Cronbach alpha ($\alpha = .73$). The overall AEC instrument yielded a Cronbach alpha of .834.

To examine ethical factors, the researcher utilized an adapted version of the Report Card on the Ethics of American Youth (Josephson Institute of Ethics, 2012). The Josephson Institute of Ethics (2017) developed this instrument and collected data from over 20,000 students, across the nation, every two years since 1998. This question asks opinions on nine ethical and unethical statements on a 4-point Likert scale (1 = “Strongly disagree”, 2 = “Disagree”, 3 = “Agree”, 4 = “Strongly agree”, and 0 = “No opinion”). Participants also answered 14 items on the importance of material and character values on a 4-point Likert scale (1 = “Unimportant”, 2 = “Moderately important”, 3 = “Very important”, 4 = “Essential”, and 0 = “No opinion”) and 14 items on partaking in unethical behaviors in the last year on a 3-point Likert scale (1 = “Two or more times”, 2 = “Only once”, and 3 = “Never”). Scores had a potential range of 37 to 134. Dr. Rick Hesse validated the instrument to have an error margin of plus or minus less than one percent

(Josephson Institute of Ethics, 2012). Based on the collected data in this study, the Cronbach alpha was .824.

The researcher applied Dillman's Tailored Design Method (DTDM) to create demographic questions in order to examine additional demographics including age, race, enrollment in honors/AP courses, and questions regarding activity participation (Dillman, Smyth, & Christian, 2014). Activity involvement included eight items regarding their participation in different activities on a 6-point Likert scale (from 1 = "Never" to 6 = "Every day") and were given six points for working eight or more hours a week. Scores on the activity scale could range from 9 to 54.

To collect data on problem-solving disposition, the researcher adapted the EMI, Critical Thinking Disposition Assessment (Irani, Rudd, Gallo, Ricketts, Friedel, & Rhoades, 2007). Irani et al. (2007) developed the EMI to examine critical thinking disposition with college-aged students and adults. The researcher employed a pilot study to select questions related to problem-solving disposition. Following the pilot study, the researcher selected 11 items to represent problem-solving disposition. The researcher altered a few items to increase item discrimination. The 11-item problem-solving disposition scale yielded a Cronbach's alpha of .871.

Data Analysis

Descriptive statistics, frequencies (*f*), percentages (*P*), means (*M*), and standard deviations (*SD*) were used to describe demographic characteristics, ethical factors, problem-solving disposition, and the AEC scale responses. The researcher employed a two-step cluster analysis to determine the existence of clusters or subgroups of participants and mean variables by cluster in regard to their responses to demographic questions, ethical factors, and problem-solving disposition. The cluster analysis utilized eight clustering variables, which was

appropriate based on recommendations for a sample size of at least 2^m (m = number of clustering variables) (Mooi & Sarstedt, 2011). A two-step cluster analysis was appropriate based on the variables being both categorical and continuous (Şchiopu, 2010). In the first step, an algorithm similar to k-means algorithm is conducted and followed by a modified hierarchical agglomerative clustering procedure to form homogeneous clusters (Mooi & Sarstedt, 2011). The researcher then applied a one-way analysis of variance (ANOVA) to compare clusters on the AEC scale and subscales to report F statistics for significant differences between clusters. An alpha level of 0.05 was set a priori.

Results

The researcher conducted a two-step cluster analysis to determine profiles of youth participants based on gender, race, age, enrollment honors/AP courses, ethical views, problem-solving disposition, activity involvement, and whether the individual participated in a long-term or short-term 4-H teen leadership club. The results generated five clusters (Table 4-1).

Cluster one ($n = 82$) consisted of white females from long-term leadership programs who take honors/AP courses. Cluster one had the highest ethical views, a slightly higher age mean, and were involved in more activities when compared with the other clusters. Cluster two ($n = 55$) was the youngest group and included a mixture of genders and individuals enrolled in honors/AP courses from short-term leadership programs. This cluster was predominately white ($n = 43$, 83.6%) with 16.4% being black ($n = 9$). Cluster two had one of the higher problem-solving dispositions, but lower ethical views. Cluster three ($n = 45$) contained white youth from long-term teen-leadership programs not enrolled in honors/AP courses. This cluster had the lowest levels of ethical views, problem-solving disposition, and activity involvement. Cluster four ($n = 40$) consisted of a mixture of races, including black ($n = 20$, 50%), multiracial ($n = 9$, 22.5%),

Asian ($n = 5$, 12.5%), Native American ($n = 2$, 5%), and those who preferred not to state ($n = 4$, 10%). This cluster had a mixture of genders and those taking honors/AP courses and the majority were from long-term ($n = 35$, 87.5%) teen-leadership programs. Cluster four had higher ethical views when compared with clusters two and three. Cluster five included white males from long-term leadership programs who take honors/AP courses and have higher ethical views and problem-solving disposition.

Table 4-1

Descriptive Statistics of Variables from Two-step Cluster Analysis by Cluster ($n = 259$)

	Cluster 1 ($n = 82$)	Cluster 2 ($n = 55$)	Cluster 3 ($n = 45$)	Cluster 4 ($n = 40$)	Cluster 5 ($n = 37$)
Variable	$f(P)$	$f(P)$	$f(P)$	$f(P)$	$f(P)$
Treatment					
Long-term	82 (100.0)	0 (0.0)	45 (100.0)	35 (87.5)	37 (100.0)
Short-term	0 (0.0)	55 (100.0)	0 (0.0)	5 (12.5)	0 (0.0)
Gender					
Male	0 (0.0)	17 (30.9)	16 (35.6)	13 (32.5)	37 (100.0)
Female	82 (100.0)	38 (69.1)	29 (64.4)	27 (67.5)	0 (0.0)
Race/Ethnicity					
White	82 (100.0)	46 (83.6)	45 (100.0)	0 (0.0)	37 (100.0)
Asian	0 (0.0)	0 (0.0)	0 (0.0)	5 (12.5)	0 (0.0)
Black	0 (0.0)	9 (16.4)	0 (0.0)	20 (50.0)	0 (0.0)
Native Amer	0 (0.0)	0 (0.0)	0 (0.0)	2 (5.0)	0 (0.0)
Multiracial	0 (0.0)	0 (0.0)	0 (0.0)	9 (22.5)	0 (0.0)
PNTS	0 (0.0)	0 (0.0)	0 (0.0)	4 (10.0)	0 (0.0)
Honors/AP					
Yes	82 (100.0)	20 (36.4)	0 (0.0)	23 (57.5)	37 (100.0)
No	0 (0.0)	35 (63.6)	45 (100.0)	17 (42.5)	0 (0.0)
	$M (SD)$	$M (SD)$	$M (SD)$	$M (SD)$	$M (SD)$
Age	15.6 (1.2)	14.8 (1.3)	15.1 (1.5)	14.9 (2.6)	15.4 (1.5)
Ethical Views	119.3(17.1)	109.3(12.5)	108.0(21.9)	116.1(12.9)	117.1(14.6)
PS Disposition	43.7 (7.1)	43.9 (6.2)	42.0 (9.6)	43.3 (5.8)	43.9 (6.6)
Activities	23.0 (6.8)	22.5 (6.4)	20.7 (6.5)	21.3 (6.5)	21.9 (6.7)

Note. PNTS = Prefer not to state, PS = Problem solving, Activities = Activity Involvement

Table 4-2

Means and Standard Deviations for Active and Engaged Citizenship and Subscales (n = 259)

	Cluster 1 (n = 82)	Cluster 2 (n = 55)	Cluster 3 (n = 45)	Cluster 4 (n = 40)	Cluster 5 (n = 37)
Variable	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Total AEC	111.9(9.3)	105.9(12.4)	107.0(12.5)	106.6(12.9)	105.0(11.6)
Civic Duty	51.8 (7.8)	46.0 (4.8)	46.4(12.4)	51.7 (5.8)	50.1 (5.9)
Civic Skills	21.3 (4.9)	19.7 (4.7)	17.7 (5.8)	19.2 (5.4)	21.1 (4.3)
Connection	20.1 (5.5)	20.1 (4.6)	19.5 (5.1)	19.1 (4.6)	20.2 (5.3)
Participation	22.1 (4.8)	21.7 (4.1)	20.5 (4.4)	22.5 (4.1)	21.4 (4.6)

Note. Connection = Neighborhood Connection, Participation = Civic Participation

A one-way ANOVA was conducted to compare the effect of cluster membership on total AEC and subscales (Table 4-3). There was a significant effect of cluster membership on total AEC at the $p < .01$ level for the five clusters [$F(4, 254) = 3.76, p = .005$]. Post hoc comparisons using the Tukey HSD test indicated the mean score for cluster one ($M = 111.9, SD = 9.3$) was significantly different from the other clusters (Table 4-2). There was a significant effect of cluster membership on civic duty [$F(4, 254) = 7.08, p = .000$]. Post hoc comparisons indicated the mean scores for cluster one ($M = 51.8, SD = 7.8$) and cluster four ($M = 51.7, SD = 5.8$) were significantly different from those of cluster two ($M = 46.0, SD = 4.8$) and cluster three ($M = 46.4, SD = 12.4$). However, cluster five ($M = 50.1, SD = 5.9$) did not significantly differ from other clusters. There was also a significant effect of cluster membership for civic skills [$F(4, 254) = 4.41, p = .002$]. Post hoc comparisons test indicated the mean score for cluster three ($M = 17.7, SD = 5.8$) significantly differed from cluster one ($M = 21.3, SD = 4.9$) and cluster five ($M = 21.1, SD = 4.3$).

Table 4-3

One-Way Analysis of Variance (ANOVA) of Clusters by Active and Engaged Citizenship (AEC) and Subscales (N =259)

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
<i>Total AEC</i>					
Between Groups	4	1951.51	487.88	3.76	.005**
Within Groups	254	32991.18	129.89		
Total	258	35942.69			
<i>Civic Duty</i>					
Between Groups	4	1727.89	431.97	7.08	.000***
Within Groups	254	15492.52	60.99		
Total	258	17220.42			
<i>Civic Skills</i>					
Between Groups	4	450.91	112.73	4.41	.002**
Within Groups	254	6494.96	25.57		
Total	258	6945.86			
<i>Neighborhood Connection</i>					
Between Groups	4	40.96	10.24	.40	.809
Within Groups	254	6510.90	25.63		
Total	258	6551.861			
<i>Civic Participation</i>					
Between Groups	4	98.84	24.71	1.24	.295
Within Groups	254	5066.83	19.95		
Total	258	5165.67			

Note. * $p < .05$, ** $p < .01$, *** $p < .001$, 2-Tailed.

Discussion and Conclusions

In community-development efforts, youth are rarely regarded as community resources (Jones, 2009); however, youth's mere presence influences society (Lerner et al., 2005). When equipped with skills and positive attitudes toward citizenship, youth are capable of meaningfully contributing to their communities which benefits both the individual and community (Christens & Dolan, 2011). By examining the impact of different variables on youth's AEC, insights can be provided to build youth-development and youth-leadership programs aimed at preparing youth

for community engagement. In this study, there were differences in overall AEC scores and two subscales—civic duty and civic skills—between different clusters of youth in Virginia 4-H teen-leadership programs.

Youth in cluster one yielded significantly higher scores for overall AEC when compared with all other groups. This group was comprised of white females from long-term teen leadership programs, who took honors/AP courses and had the highest activity involvement and levels of ethical views. Cluster one and cluster four were found to have significantly higher levels of perceived civic duty when compared to clusters two and three. Youth in cluster two were all participants in short-term 4-H teen-leadership programs. Although cluster two only significantly differed from clusters one and four, this cluster had the lowest mean score for civic duty and was the only cluster that was not predominately comprised of youth from long-term programs. Although significant differences existed, the researcher acknowledges practical significance is relatively low.

Cluster three consisted of participants from long-term leadership programs, but no participants were enrolled in honors/AP courses. Additionally, cluster three had the lowest reported levels of ethical views, problem-solving disposition, and activity involvement. Cluster three also yielded the lowest mean for civic skills and significantly differed from other teens in long-term leadership programs in clusters one and five. When compared with clusters one and five, cluster three varied by not included youth enrolled in honors/AP courses, and youth had lower levels of ethical views and problem-solving disposition.

These results raise several questions for further examination in relation to the benefits of long-term teen-leadership programs when compared with similar short-term programs in Virginia 4-H. With mastery (Redmond & Dolan, 2016) and intentional opportunities for

engagement in planning and decision-making processes (Kress, 2006) as the focuses of youth leadership, long-term 4-H teen-leadership programs should provide youth with increased knowledge on community issues and capacity for engaging as leaders in their communities. However, there was a clear implication for enrollment in honors/AP courses was a factor that significantly impacted overall AEC, civic duty, and civic skills. This was particularly apparent for the civic skills construct where clusters one and five yielded significantly higher scores when compared with cluster three. Recall, all three of these clusters were white youth in long-term leadership programs. Classes for gifted youth often provide avenues for the development of problem-solving skills and the creation of action plans (Terry, Bohnenberger, Renzulli, Cramond, and Sisk, 2008), which may have implications for competence in problem-solving. If ethical views, problem-solving disposition, and activity involvement all impact AEC, are the leadership programs increasing these constructs or are academic courses providing the treatment? This calls for further research related to the effectiveness of these programs in relation to the academic achievement of participants.

Neighborhood connection and civic participation did not significantly differ among clusters, regardless of treatment or enrollment in honors/AP courses. These findings could be related to all participants' involvement in 4-H. Lerner, Lerner, and Colleagues (2013) revealed that 4-H members were twice as likely to engage with their communities and four times more likely to contribute to society. Although involvement in 4-H should increase all constructs of AEC, civic participation may be similar for all groups based on community-service opportunities often provided through the organization. Additionally, 4-H has developed curricula and training for the development of strong youth-adult partnerships (Zeldin, Christens, & Powers, 2013) for both adult volunteers and extension employees. Youth-adult partnerships are known for

providing support for youth development by increasing self-worth along with other positive outcomes (Anderson & Sandmann, 2009). This increased sense of self-worth, along with positive support from adult and peer role models, may also explain similar levels of neighborhood connection through participation in 4-H programs.

Overall, this study provides insight on the development of AEC in youth participating in 4-H teen-leadership programs. AEC, civic duty, and civic skills varied for youth participants based on different clusters derived from program treatment, gender, race, enrollment in honors/AP course, age, ethical views, problem-solving disposition, and activity involvement. Notable findings related to program treatment, gender, and enrollment in honors/AP courses. Levels of ethical views, problem-solving disposition, and activity involvement also varied between clusters of participants in long-term teen-leadership programs and raised questions regarding the impact of long-term treatment in relation to enrollment in honors/AP courses. Further exploring this phenomenon and infusing teen-leadership programs with opportunities for problem-solving and character development could heighten AEC for youth participants.

Recommendations

Based on the findings, there are several recommendations for practice and research moving forward. The first recommendation, which is related to practice, is to consider methods for increasing character education and problem-solving opportunities associated with community issues and development to increase AEC in all youth participants. Findings indicated that participation in a long-term 4-H teen-leadership program alone did not indicate higher levels of AEC when compared with the cluster of youth who participate in short-term programs. Further, participants of short-term programs had the lowest scores on the civic duty subscale. This

indicates a need for short-term 4-H teen-leadership programs—such as camp-counselor trainings—to make connections between the purpose of the training and contributions to society.

It is also recommended that Extension professionals and other youth-leadership practitioners consider the role that gender may play in the development of AEC. Hall and Coffey (2007) discussed gender differentiation in citizenship, saying that “much of the current negative and anxious commentary about young people and the ‘don’t care’ culture is implicitly, and sometimes explicitly, directed at young men in particular” (p. 294). They go on to note that women are expected to contribute, but males are often viewed as noncontributors. Based on this notion, sociocultural development of views toward citizenship may differ based upon gender, which would explain the variations between similar clusters differing predominately on gender alone, especially the differing levels of AEC. It is recommended that teen-leadership professionals ensure that programs are promoting gender inclusion in citizenship-focused curriculum and that they think intentionally about the engagement of males as contributors to their communities.

With citizenship as a priority in 4-H (National 4-H Headquarters, 2011), professional development is needed for Extension agents to fully understand the innerworkings of these clusters and how program improvements and adjustments may aid to increased levels of AEC. These clusters allow us to examine how indicators combine to impact independent variables. Therefore, social science researchers should also consider how results may differ from traditional variable-centered analyses and consider a variety of statistical methods to ensure participants are treated as heterogeneous in nature. It is essential to keep in mind how individual development is a result of the bidirectional relationship between an individual and their context over time.

Program goals of 4-H indicate high priorities for the development of self and of abilities to be meaningful contributors to their communities (4-H National Headquarters, 2011).

Therefore, it is recommended that future research and replication include a wider range of teens not participating in 4-H or teen-leadership programs in order to derive comparison from the impact of the 4-H program on AEC, problem-solving disposition, and ethical views. Further, the relationship between enrollment in honors/AP courses and ethical views and/or problem-solving disposition should be further explored.

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CHAPTER 5

MANUSCRIPT #3

Creating a Model for Youth in Community Problem Solving

Youth participation in community problem-solving efforts provides an opportunity for communities to harvest youth as resources. In order to sustain these initiatives, a conceptual model for Youth in Community Problem Solving (YCPS) was developed based on theory. Sociocultural theory and reasoned actioned approach situated within relational developmental systems metatheory provided a foundation for the YCPS model. Additional literature on positive youth development, youth-leadership development, self-consciousness, sense of community, and problem-solving disposition was utilized for support of the model. Evidence for the inclusion of problem-solving disposition in the model was found through a recent study with youth in leadership programs. For youth to engage in YCPS partnerships, both youth and adults should be equipped with the necessary tools and resources for equal partnership to overcome power dynamics and inner team conflicts.

Introduction

From an interactional lens, a community is not a stagnant, geographically bound locale; rather, community is dynamic in nature and is constructed from the actions of its members (Barnett & Brennan, 2006). From this perspective, a bi-directional relationship exists between members and their environment whether intentional or unintentional (Lerner, 2015). Communities often do not recognize youth as contributors to their communities; however, youth are able to provide diversity to community problem-solving efforts and contribute to develop health and longevity in their communities (Checkoway & Gutierrez, 2006). A conceptual framework for involving youth in community problem solving (YCPS) provides an avenue to

explore how youth leadership, community development, and social change can be interwoven to build stronger communities (Barnett & Brennan, 2006).

This paper aims to provide a conceptual framework for youth partnerships in problem solving in practice that will increase active and engaged citizenship and integrate youth in problem-solving efforts. Connell, Gambone, and Smith (2011) postulate that nutrition, health, shelter, supportive relationships, engaging activities, learning experiences, opportunities for involvement, and physical and emotional safety are all necessary for young people to reach their goals. PYD programs should be established with the youth's context in mind and with a focus on preparing youth to be meaningful contributors to their communities. Relational developmental systems (RDS) metatheory, sociocultural theory, and reasoned action approach all provide support for the YCPS conceptual framework. Overall, this paper outlines a basic framework for increasing the engaged citizenship of youth and for increasing youth's benefits to local communities through collaborative community problem solving.

History of Youth Development

Over the past century, practitioners' and researchers' views on youth development evolved through three distinct phases (Lerner, 2005). In phase one, researchers plagued youth development as a time of storm and stress and viewed youth as a nuisance to society or as "beasts" to be civilized into productive adults (Lerner, 2005). During the 1960s, scholars considered youth as a pivotal time for healthy or dysfunctional development which resulted in the examination of the impact a variety of developmental and social factors can have on individual growth (Lerner, 2005). Phase two resulted in the creation of grand theories focused on internal development and on pathways for prevention of deviant or problem behaviors (Lerner,

2005). In the 1990s and early 2000s, positive youth development (PYD) arose to the forefront of youth scholarship in phase three (Lerner, 2005).

Positive Youth Development (PYD)

PYD regards youth as a developmental time when biological and contextual factors are mutually influential to both the youth and their environment (Lerner, 2005) and when meeting both deficit and being needs is essential for optimal growth (Kress, 2006). Deficit needs are the basic needs included in Maslow's (1968) hierarchy: physiological, safety, and belongingness. Deficit needs must be met before being needs such as esteem and self-actualization, but being needs can be approached through a PYD framework.

Through PYD, youth are encouraged to nourish their strengths, talents, interests, and future potential to become "thriving" youth who ultimately contribute to their communities (Damon, 2004; Worker, 2014). PYD can be defined as:

An intentional, prosocial approach that engages youth within their communities, schools, organizations, peer groups, and families in a manner that is productive and constructive; recognizes, utilizes, and enhances young people's strengths; and promotes positive outcomes for young people by providing opportunities, fostering positive relationships, and furnishing the support needed to build on their leadership strengths (Youth.gov, n.d., para. 2).

PYD literature identifies five "Cs" as the basis for flourishing youth. These five "Cs" include competence, confidence, connection, character, and caring (Zarrett & Lerner, 2008). Youth who are thriving and progressing toward the satisfaction of the "Five Cs" cultivate their talents for contribution, which is deemed as the sixth "C" (Larson, 2000). Thriving youth are able to engage effectively in civic endeavors through contributions to family, community, self, and civil society

as a whole (Lerner, Dowling, & Anderson, 2003). PYD also reduces adolescent risk behaviors (Shek & Sun, 2015). Community youth development (CYD) extends this framework to include community-based principles and positive mentoring relationships with adults (Villarruel, Perkins, Borden, & Keith, 2003). The five “C”s are seen as essential to the development of successful young leaders and are the underlying values of engaged citizenship (Kress, 2006).

Defining Engaged Citizenship

Citizenship can be defined as “the ability to move beyond one’s individual self-interest and to be committed to the well-being of some larger group of which one is a member” (Sherrod, Flanagan, & Youniss, 2002, p. 265). For youth, citizenship is often viewed as doing what is expected or following laws (Barnett & Brennan, 2006); however, active and engaged citizens possess a sense of civic duty and confidence in their capacity to affect change (Zaff, Boyd, Li, Lerner, & Lerner, 2010). Civic engagement opportunities are often offered for youth through volunteerism and extracurricular activities. To increase youth involvement, Barnett and Brennan (2006) suggest: providing long-term opportunities; incorporating personal self-growth, skill enhancement, and leadership development; developing a capacity for youth leadership; providing opportunities for input; forming connections with schools and youth practitioners; allowing for youth participation in comprehensive planning and policy efforts; incorporating opportunities for youth to serve dependent upon their own interests; and including youth in community problem solving. By viewing and utilizing youth as community resources, the youth and community mutually benefit (Redmond & Dolan, 2016).

Active and engaged citizenship (AEC) includes behavioral, cognitive, and socioemotional constructs (Zaff et al., 2010). An active and engaged citizen needs to feel a personal sense of civic duty and a confidence in their capabilities while harvesting a sense of

belonging and commitment to drive change in their community (Zaff et al., 2010). From this perspective, civic action, civic skills, social connection, and duty serve as constructs of active and engaged citizens and predict current and future civic participation (Zaff et al., 2011). Lerner, Bowers, Geldof, Gestsdóttir, and DeSouza (2012) described personal characteristics and ecological assets as additional focuses for the prediction of: PYD, contributions to community, and risky or problematic behavior. These findings infer that identifying strengths, maximizing positive development, and diminishing negative impacts within a youth's context all aid in promoting the success of youth and their likelihood of participating as an active and engaged citizen in their community (Lerner et al., 2012).

Community Problem Solving

Complex challenges require leadership to extend problem-solving partnerships and create diverse teams in order to meet the demands of wicked problems. A wicked problem is complex and unique problem without a correct answer (Grint, 2005) to which every solution yields unintended consequences that produce more problems to be solved (Merton, 1936). Although these consequences cannot be avoided, diverse teams provide an opportunity for assessing impacts from a holistic perspective. When building diverse teams to solve wicked problems, we must consider diversity and inclusivity. Youth must be included in community problem-solving efforts to provide their exclusive perspectives and to avoid skewed, adult-centric perspectives of youth (Bell, 2003).

Community participation by youth is mutually beneficial for both the youth participants and the community (Redmond & Dolan, 2016). When “thriving” youth are provided with the tools and support necessary to participate in community problem solving, they are able to contribute to the process as current leaders. Youth/adult partnerships, decision-making power,

contexts for learning and service, and self-recognition of experiences, knowledge, and skills are critical elements for success (DesMarais, Yang, & Farzanehkia, 2000). Intentional programs built with sustenance, healthy relationships, and opportunities to harvest strengths increase the chances for youth to thrive despite change in order to become resilient and capable community partners (Lerner et al., 2012). When provided with these tools for success, youth participation offers an ample opportunity for approaching challenges of the 21st century from a more holistic and responsible position (Redmond & Dolan, 2016).

Youth must be harvested as a community resource rather than as tomorrow's leaders. Within their context, youth utilize their experiences, skills, and knowledge to engage in analogical reasoning and metacognitive skills, allowing for retrieval the of appropriate information for application for the problem at hand (Schunk, 2016). MacNeil (2006) posits that incorporating youth in collaborative and functional approaches to problem-solving predicts higher success. From this perspective, it is essential to expand the understanding of young people's involvement in successful partnerships and to maximize inclusion in problem-solving processes. This involves utilizing an RDS approach to consider youth's civic engagement and citizenship development in relation to problem solving.

Theoretical Foundation

RDS metatheory postulates that youth should be viewed from a strength-based perspective as resources to be developed (Geldhof, Bower, & Lerner, 2013). Examining trajectories toward civic engagement and community problem solving enables a greater understanding of the mutually-influential person-context relations involved within RDS (Zaff et al., 2011). The theoretical foundation for this study is built on RDS metatheory and the roles of sociocultural theory and reasoned action approach. In addition, the PYD framework, citizenship

literature focused on the development of “thriving” youth, and leadership scholarship are incorporated to provide a framework for YCPS usage in practice and program development.

Relational Developmental Systems (RDS) Metatheory

RDS metatheory provides an approach to explore how individuals interact within their contexts and develop through an accrual of past, present, and future experiences (Lerner, 2015). In RDS, systematic inter- and intra-individual and behavioral changes occur throughout an individual’s life span based on the mutually-influential relationships between a person and their context (Overton, 2013; Overton, 2015). Essentially, development occurs differently for each person because their context and lived experiences are unique. Organisms are fundamentally active, self-creating, self-organizing, and self-regulating in a plastic, nonlinear complex adaptive system (Overton, 2015). However, development is often systematic and continuous rather than random in nature (Lerner & Overton, 2008), whereas the organism’s actions function coactively with the physical and sociocultural environment it inhabits.

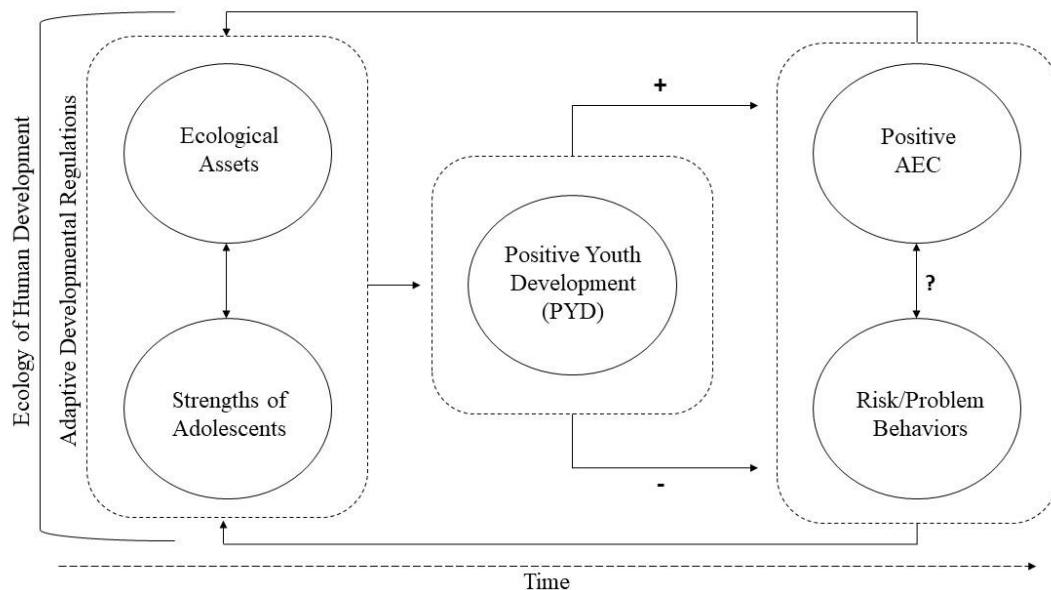


Figure 5-1. Adapted from Lerner et al.’s (2014) model for active and engaged citizenship of youth.

Within Lerner et al.'s (2014) model for AEC of youth (Figure 5-1), adaptive developmental regulations between ecological assets and strengths of adolescents are associated with PYD and a decrease in the probability of partaking in risk behaviors; in turn, positively influencing the likelihood for engagement in contributions to self, family, and community. A great deal of support for this model is available in literature (e.g. Gestsdóttir, Bowers, von Eye, Napolitano, & Lerner, 2010; Lewin-Bizan, Bowers, & Lerner, 2010; Li & Lerner, 2011; Mueller, Lewin-Bizan, and Urban, 2011; Zaff et al., 2010, Zaff et al., 2011). This model serves a basis for the integration of YCPS in youth contribution.

Sociocultural Theory

Vygotsky's (1978) sociocultural theory posits that human consciousness is essential for constructing social meaning, whereas knowledge is constructed between more than one individual in their environment. Alfred (2002) acknowledges the importance of recognizing how cultural perspectives and identity impact youth. Family, community, institution, workplace, and wider society are all environments to take into consideration. Further, race, class, gender, nationality, and sexual preferences are just a few examples of identities that individuals uphold within their environment. As in RDS, an individual's development is influenced by both personal and contextual factors resulting in behaviors (Holtzapple et al., 2011).

Reasoned Action Approach

Reasoned action approach takes the concepts of RDS and sociocultural theory one step further to examine how intentions influence behavioral choices. The reasoned action approach (Figure 5-2) outlines how individual, social, and informational background factors influence beliefs that impact attitudes, norms, and behavioral control resulting in the development of

intentions (Fishbein & Azjen, 2010). Within this approach, perceptions of benefits and consequences, social pressures and responses, and capabilities for performing a behavior all influence attitudes, norms, and behavioral control (Fishbein & Azjen, 2010). Intention, the readiness to perform a behavior, is the best predictor and measurement of the probability that an individual will partake in a specific behavior (Fishbein & Azjen, 2010). By examining intentions and the influence of background factors, we can develop programming best suited for contribution and YCPS behaviors.

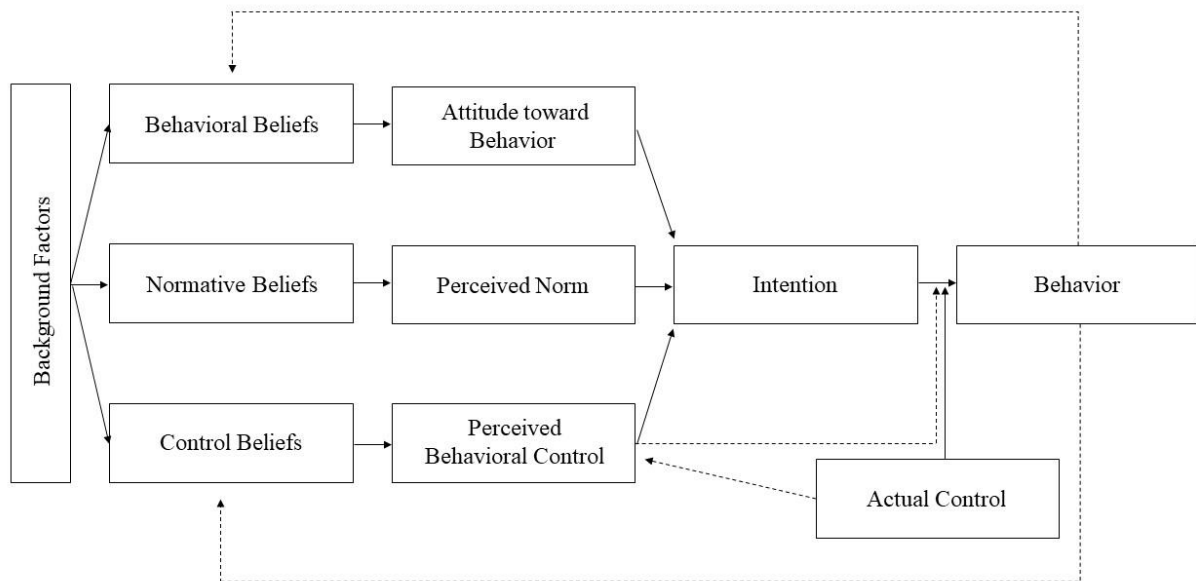


Figure 5-2. Adapted from Fishbein & Azjen's (2010) reasoned action approach model.

Conceptual Framework

Figure 5-3 provides a YCPS conceptual framework for youth's involvement in community problem solving and, ultimately, AEC. Within the YCPS model, a trajectory is depicted to predict how the incorporation of adaptive developmental regulations to enhance the probability for involvement in community-based problem solving and AEC. The presented normative sequence acknowledges multiple action paths with respect to biological, sociocultural, and physical environmental subsystems while providing a framework for optimization of youth.

This conceptual framework is built upon relationships for support and capacities for success. Positive peer relationships and youth-adult partnerships pave the way for youth to find their place in their greater communities and to understand how to adhere to societal norms. Further, youth begin formulating a collective sense of community and an understanding of the communities in which they live. Personal identity formation and self-consciousness are built through experiences, skill development, and knowledge. Self-consciousness allows youth to see how their skills, experiences, and knowledge can benefit to their communities. Sense of community and self-consciousness can be bolstered through leadership development, in which thriving youth partake in leadership practices to ultimately become contributing youth who engage in problem-solving partnerships.

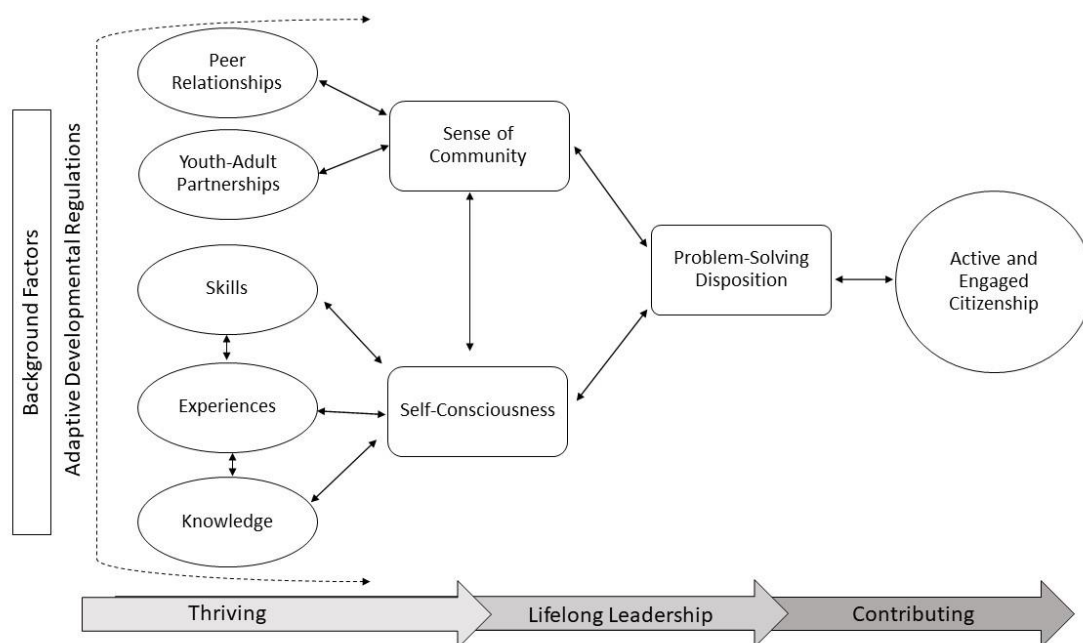


Figure 5-3. Conceptual Model for Youth in Community Problem Solving (YCPS).

Problem-solving partnerships, which require a positive problem-solving disposition, include safe environments in which youth are provided with the support necessary to become

equal partners who contribute to the economic, social, political, and environmental challenges in their communities. Successful participation in this process increases competencies and culminates in AEC. As indicated in Figure 5-3, adaptive developmental regulations result in variations in each youth's experience through this development. All components of the YCPS model are mutually influential to one another and serve as adaptive developmental regulations that advance to increase the likelihood of positive development toward AEC.

Thriving Youth

PYD is essential to the development of successful youth leaders (Kress, 2006) and the underlying values of AEC (Lerner et al., 2014). Once a young person is thriving, they are able to cultivate their own talents for contribution (Larson, 2000). Thriving youth have the capacity to contribute by engaging in civic endeavors through contributions to family, community, self, and civil society as a whole (Lerner et al., 2003).

Youth development involves meeting both deficit and being needs (Kress, 2006). Deficit needs are the basic needs included in Maslow's (1968) hierarchy: physiological, safety, and belongingness needs. These needs must be met before being needs—esteem and self-actualization. Therefore, we must take into consideration unmet needs prior to providing experiences meant to meet higher needs (Kress, 2006). People are motivated to fill each level and cannot concentrate or invest themselves in meeting the needs of a higher level without having the previous levels gratified (Maslow, 1954). For instance, within the model presented, youth cannot develop a sense of community without first having their basic physiological and safety needs met. This is essential to consider within programming efforts because the YCPS conceptual model exhibits movement through the hierarchy of needs toward being needs. However, youth will be unmotivated to participate, if their basic physiological needs are not met.

This is especially important when working areas with prevalent poverty and/or adversity. A recent study demonstrated that, when deficiency needs are diminished, students suffer (Noltemeyer, Bush, Patton, & Bergen, 2012). Further, youth's social interactions and abilities to avoid peer pressure may greatly be influenced by their needs for belonging (Taormina & Gao, 2013). Maslow (1954) posits that humans are not motivated if their immediate prerequisites are not met. These prerequisites include:

Freedom to speak, freedom to do what one wishes so long as no harm is done to others, freedom to express oneself, freedom to investigate and seek for information, freedom to defend oneself, justice, fairness, honesty, and orderliness in the group (Maslow, 1954, p. 22).

Dependent on background factors, these prerequisites may not be met, which could cause program members to be unmotivated participants. Therefore, practitioners must be in tune with the needs of their participants.

When deficit needs are met sufficiently, being needs can be approached through a PYD framework. This framework can be utilized through a multitude of applications designed to effectively increase opportunities for youth to thrive and bolster their capacity for resilience in the face of adversity; strengths, in relation to ecological assets, should be examined in order to maximize positive developments and to minimize the probability of negative impacts (Lerner et al., 2012). Focusing on ecological assets and strengths provides a better basis for bolstering PYD than a focus on predicting abrupt or nonnormative changes would (Lerner et al., 2012). Thriving youth with adaptive developmental regulations—mutually beneficial relations between the individual and their context—are more likely to feel connected to their community and to feel competent in their capacities to contribute. Adaptive developmental regulations can be

influenced positively within the YCPS model by focusing on skills, knowledge, experiences, peer relationships, and youth-adult partnerships. Additionally, background factors should be considered for their roles as adaptive developmental regulations or as barriers towards PYD.

Within PYD, competence, confidence, connection, character, and caring must all be provided in order for meaningful contribution to take place. Competencies do not develop naturally over time but must be “deliberately and systematically taught, practiced, and improved through instructional feedback” (Weiss, 2011, p. 57). This requires the development of skills and knowledge along with experiences or opportunities for practice. Confidence is emphasized through the development of competencies that impact self-worth and a positive identity and influence self-consciousness (Gestsdóttir & Lerner, 2007). Caring can be developed through meaningful relationships—with both peers and adults—that promote sympathy and empathy for others (Phelps et al., 2009). Further, connection is reaped and results in mutually-beneficial relationships between individuals and their communities that increase the feeling of a sense of community (Phelps et al., 2009). Finally, character development is influenced by interactions with individuals and experiences that build on self-consciousness and moral intentions toward positively impacting society.

Skills. Skills do not always equal ability, but they do serve as the foundation for fruitful leadership and immersion in community problem solving. Within a learning context, skill development is based on cognitive community problem-solving processes in which communication, conflict resolution, decision making, initiative, civic engagement, and negotiation skills are essential life skills for youth (Bean, Harlow, & Kendellen, 2017; Kress, 2006; Reichard et al., 2011). When competence is developed, skill acquisition occurs (Schunk, 2016).

After skill development, a learner must engage in metacognition, which involves recall to the learned skill and a reflection of how that skill will contribute to the problem at hand and transfer to other circumstances. Additionally, youth must develop self-efficacy in order to identify their deficiencies and continue to expand their skills (Schunk, 2016). Within reasoned action approach, skill development and competence act as gatekeepers, allowing or disallowing an intention to become a behavior by way of control beliefs and behavioral control (Fishbein & Ajzen, 2010). Developed skills must be adaptive developmental regulations in order to be beneficial to both intraindividual growth for the youth and the betterment of the youth's environment. Therefore, it is essential that youth to develop skills and competencies necessary for success in leadership endeavors, collaboration in problem solving, and development of self-consciousness.

Knowledge. Knowledge is developed through concept learning with declarative, procedural, and conditional knowledge, all of which are essential for youth development. Declarative knowledge is knowing “that” and includes facts, content, and meanings (Schunk, 2016). Procedural knowledge is knowing “how” and involves understanding how to apply declarative knowledge. Conditional knowledge is based on “when” and “why” to utilize declarative and procedural knowledge (Schunk, 2016). Within problem-solving and competency development, learners must utilize their conditional knowledge in application and acquire knowledge faster when it is originally presented from a positive perspective.

Knowledge also serves as an adaptive developmental regulation when procedural and conditional knowledge is understood from a contextual application standpoint. Previous scholars attributed social and character-based knowledge to an understanding of citizenship as the ability to serve the greater good (Hilliard et al., 2014; Zaff, Malanchuk, & Eccles, 2008). This requires

individuals to have an understanding of civic knowledge and of problem-solving capacities for community benefit and improvement. Within reasoned action approach, the co-construction of knowledge is based on the individual and their social environment altering perceived norms and attitudes toward the behavior (Fishbein & Azjen, 2010).

Experience. The YCPS model incorporates experience from a constructivist perspective: some things cannot be taught, but must be developed from experiences and practice. From this perspective, knowledge and skill are both impacted by experience. Recall skills and knowledge are obtained in regard to mutually influential relations between the individual and their context, which involves an understanding of how ecological assets, biases, and perspectives impact understanding and transfer of knowledge and skill. Within Piaget's (1964) theory of cognitive development, youth perceive and observe in order to make sense of a world in which different contexts and circumstances lead to diverse perspectives.

"Situated cognition emphasizes the importance of context in establishing meaningful linkages with learner experience and in promoting connections among knowledge, skill, and experience" (Choi & Hannafin, 1995, p. 54). Situated cognition refers to the relationships between a person and their experience within the situation or context. This requires authenticity in tasks, activities, and real problem-solving situations. In situated learning, youth build a collaborative construction of knowledge through insightful reflection and debriefing lessons from previous experiences (Miller, 2002). "Evolving historical, cultural, and political systems, the activity among learners, and the tools learners use within those interactions, including languages, recursively and differentially constitute learning and knowing" (Niewolny & Wilson, 2009, p. 35). The mutually influential relationships between individual and context culminate in the development of self-consciousness and ability to make sense of your place in the world.

Within civic orientation, personal experiences inform one's view of civic participation and of the way they relate to their own communities both locally and on a larger global scale.

Peer relationships. Positive peer relationships play a foundational role in one's sense of belonging. Social comparison occurs when one compares themselves to others (Schunk, 2016) and can be dangerous for youth and either degrade their self-concept or be a positive motivator. Schunk (2016) defines self-concept as "one's collective self-perceptions (a) formed through experiences with, and interpretations of, the environment and (b) heavily influenced by reinforcements and evaluations by significant other persons" (p. 369). Youth hold their peers in high regard and learn behaviors from social modeling, which is reinforced through positive social responses (Biggar, Forsyth, Chen, & Richard, 2016; Crockett & Crouter, 1995; Kim, Lee, & Leban, 2017; van de Bogardt et al., 2017). van de Bogardt et al. (2017) revealed a relationship between deviant behaviors and a peer group's views on the behavior—especially in relation to sexual activity. Therefore, actions may vary based on context and views of the peer group.

Within RDS, contextual social relationships impact overall development and the trajectory of a normative sequence. Additionally, peer relationships can negatively or positively impact one's perceived norms and attitudes toward behavior within the reasoned action approach (Fishbein & Azjen, 2010). For instance, a friend group may provide social pressures to partake in a risky behavior, and the reward and reinforcement from peers may be viewed as greater than the negative response elicited by the behavior (Akers, Krohn, Lanza-Kaduce, & Radosevich, 1979). Ultimately, behavior and normative beliefs may be impacted in a negative way and result in risky behaviors. However, youth can also impact beliefs in a positive sense and encourage the individual to develop positively. These positive relationships often to predict civic behaviors (Zaff et al., 2008).

When interacting with each other, it is essential for youth to have peers who increase their self-confidence and self-esteem and who foster a positive view on the youth's self-concept. Self-esteem is constructed based on self-worth, while self-confidence is based on the belief of one's own ability to successfully complete a task (Schunk, 2016). Confidence in abilities bolsters a sense of belonging and an understanding of youth's role in change efforts (Zaff et al., 2010). Positive role models and peer support increase the likelihood that youth will develop an understanding of mutual trust and the benefit of commitment (Burton & Marshall, 2005; Feldman & Matjakso, 2005). Additionally, these opportunities provide participants with a positive view and connection to their communities (Morrissey & Werner-Wilson, 2005).

Youth-adult partnerships. Parents and guardians play a significant role in the development of their children, including being their children's first social role models. Youth with parents who are active in their communities through civic and volunteer organizations are more likely to be involved in the same type of activities (Zaff et al., 2008). Supportive relationships with adults other than one's parents also impact PYD (American Psychological Association, 2002). Positive youth-adult partnerships are known for providing positive developmental experiences for youth (Anderson & Sandmann, 2009) by increasing self-confidence and self-esteem, expanding self-worth, regressing powerlessness, instilling the feeling of being taken seriously, growing positive self-concept, decreasing risky/deviant behavior, impeding self-destructive actions, and imparting the feeling of being loved and/or wanted (Bell, 2003). Youth require support from more than just their peers if they are to develop self-confidence; they need a safe place to reflect on personal identity development experiences (Komives, Longerbeam, Owen, Mainella, & Osteen, 2005).

Additionally, adults provide models for imitation through observation of behaviors and attitudes (Kress, 2006). These observations serve as models for values and examples of citizenship. Modeling allows youth to comprehend: behavioral beliefs and social norms, how consequences or rewards might be provided based on actions, and how others will perceive those actions (Fishbein & Azjen, 2010; Schunk, 2016). Youth hold prestige for those they model and often want to uphold the societal values and norms based within their culture.

Life Long Leadership

Leadership is a social process (van Linden & Fertman, 1998). Successful leaders must develop skills and knowledge as well as engage in experiences in order to understand how to interact with and lead others. This development can begin as early as five years of age (van Linden & Fertman, 1998). One's experiences throughout life influence how they interact with others and view the world. The definition of leadership can be a bit ambiguous; a traditional definition states that leadership is "a process whereby an individual influences a group of individuals to achieve a common goal" (Northouse, 2013, p. 3). Hanks et al. (2015) refers to leadership as "the collective interactions that inspire others to dream, learn, do, and become more" (p. 1). These definitions differ, but both are based on the premise that leadership development throughout one's entire life. Leadership can be viewed as a continuous learning process built on knowledge and experience for advancing capacities (Brungardt, 1997) with leadership development being a journey towards leadership potential. The leadership identity model supports this journey by acknowledging different stages of development throughout the process (Komives et al., 2005).

Youth leadership development. Because scholars cannot agree on a single definition, there are also varying models regarding youth leadership development and education. Some of

these models focus on the skills and knowledge required to be a successful leader (Klau, 2006; Kahn, Hewes, & Ali, 2009; Ricketts & Rudd, 2002; van Linden & Fertman, 1998; Wang & Wang, 2009; Zeldin & Camino, 1999). Ricketts and Rudd (2002) built their conceptual model through a meta-analysis and claimed that the skills needed to harness leadership potential included leadership knowledge and information; leadership attitude, will, and desire; decision making, reasoning, and critical thinking; oral and written communication skills; and intrapersonal and interpersonal relations. Similar to other leadership-development models, this model includes skill development without experiences and practices as a central focus whereas Redmond and Dolan's (2016) model culminates with authentic opportunities for mastery. According to this model, youth leaders must develop a clear vision for their goals, gain skills to motivate buy-in, and implement community-based actions projects. Although this model incorporates actions and practice for young leaders, the collective capacity required for YCPS is missing.

Kress (2006) defines youth leadership as “the involvement of youth in responsible, challenging action that meets genuine needs, with opportunities for planning and decision making” (p. 51). This definition encourages youth leadership efforts to include an opportunity for youth to develop their own capacity, implement their learned skills, and collaborate with others to positively impact their communities. To engage in social change, teamwork, and collaborative partnerships, youth leaders must have a foundation of strong values and integrity while engaging in shared leadership (Higher Education Research Institute, 1996). Youth leadership from this perspective incorporates social-justice-based values and the development of shared vision for positive change.

Youth-leadership programs. Intentionality is central within a successful leadership development program. Exemplary programs include “the deliberate teaching of learning opportunities or life skills within a program—paired with strategic decisions to create opportunities that maximize developmental outcomes” (Bean et al., 2017, p. 76). Exemplary program implementers utilize theory and practice within the development, implementation, and evaluation of their programs. Van Linden and Fertman (1998) posit that awareness, interaction, and mastery are the three distinct phases of leadership development. Ricketts and Rudd (2002) expanded these phases by including the processes of comprehension, analysis, application, synthesis, and evaluation within each. These models provide a solid foundation for program development.

Within practice, the future orientation of developmental outcomes is a common issue with youth leadership programs today. We often view adolescents—through a traditional power lens—as incapable of significantly impacting their communities. This results in preparation aimed at future leadership roles rather than providing youth with a voice as a current leader (Mortensen et al., 2014). Providing youth with the capacity to act as leaders in their communities and with mentors to guide their development, gives youth invaluable experiences and increases their capacity within their communities (Redmond & Dolan, 2016). Leadership development opportunities allow youth to develop a sense of community and a self-consciousness for engaging in community problem-solving partnerships.

Self-consciousness. Self-consciousness allows youth to understand how their skills, experiences, and knowledge can be applied within the greater contexts. Individuals strive for control of the events that impact their lives, as discussed in reasoned action approach. Youth are able to effectively utilize metacognition and self-regulate learning when they set goals, evaluate

their progress, and make changes as necessary (Schunk, 2016). Skills, knowledge, and experiences provide an avenue for self-efficacy, metacognition, and self-regulation, which leads to the development of self-consciousness.

Self-regulation is “the process whereby individuals activate and sustain behaviors, cognitions, and affects, which are systematically oriented toward the attainment of goals” (Schunk, 2016, p. 121). Self-regulation occurs through the internalization of the social context in which the learning occurred (Overton, 2015). Self-regulated learning occurs when someone actively seeks out the knowledge, skills, and experiences required to meet a set goal. When youth are able to self-regulate, they can take ownership of their own learning.

Self-efficacy is developed through performance. Perceived self-efficacy is one’s own beliefs in their capabilities to carry out a learned behavior or accomplish a task. Self-efficacy is often related to effort and task persistence (Schunk, 2016) and impacts behavioral control and intention (Fishbein & Azjen, 2010). Additionally, sense of agency is heavily impacted by self-efficacy (Komives et al., 2005). Youth are able to develop personal agency by intentionally focusing on whom they want to be and how they want others to perceive them (Bandura, 2001). By expanding self-awareness and understanding, self-consciousness allows for the youth to advocate for their competencies and feel confident in problem solving and collaborating with others. Relationships—which build a person’s sense of community but also impact their self-consciousness—are the anchor for adaptive developmental regulations.

Sense of community. The collective relationships between peers and adults provide youth the opportunity to share a sense of community with others. Leadership trends are moving away from individualized concepts and toward shared leadership (MacNeil, 2006). Through self-determination and self-worth, youth are able to find their places in society. This orients youth

toward the achievement of shared or common good through civic actions. Self-worth theory posits that youth who feel connected and supported by others feel capable and valued (Schunk, 2016). This translates into their likelihood to engage in activities with a potential for failure. Youth are more likely to take on risky tasks if they do not have a fear for diminished self-worth. This shared sense of community also connects with self-determination because youth associate positive feelings (Dawes & Larson, 2011) with their success and the success of their communities. Self-determination, self-worth, and self-concept all directly impact self-consciousness and overall personal agency.

Problem-solving Disposition

When considering ways to solve wicked problems by including youth in the problem-solving process it is important to consider how a youth's problem-solving disposition will impact their participation. Youth with a sense of community and self-consciousness have a higher understanding of the role they can play in their community and their ability to utilize their knowledge, skills, and experiences to do so. However, we must also consider youth's willingness to participate in the problem-solving process.

An individual's problem-solving disposition is their intention to engage in the behavior of problem-solving. In reasoned action approach, intention is the highest predictor of one's likelihood to partake in a behavior (Fishbein & Azjen, 2010). An individual's intention—the readiness to engage in a behavior—is impacted by their attitude toward the behavior, perceived norms, and perceived behavioral control (Fishbein & Azjen, 2010). Therefore, when individuals have a higher problem-solving disposition they are more likely to engage in the behavior of problem solving.

Evidence of the Model

A recent study conducted on the influence of ethical factors, demographic characteristics, and problem-solving disposition on AEC with youth participating in long-term and short-term 4-H teen leadership programs provided insight on the YCPS conceptual framework. Participants in long-term leadership programs had significantly higher levels of AEC when compared with their peers in short-term programs. These results support the role of lifelong leadership in the development of AEC. Further, problem-solving disposition and ethical factors were significant predictors of AEC for both short-term and long-term teen-leadership program participants. This provides evidence of the impact that thriving youth and a sense of community have on AEC and implicates the role of problem-solving disposition in contributing to one's community. Problem-solving disposition is developed through self-consciousness and through confidence in a youth's ability to affect change. However, to engage in collaborative community problem solving, scholars need to continue exploring the role of a sense of community.

Challenges of Implementation

Although allowing youth to impact organizational and community change provides opportunities for both the youth and the community, implementation is not without challenges. Organizations and adults are often limited in their understanding and attitudes toward youth as community problem solvers (Checkoway et al., 2003). Developing an appropriate power balance is difficult to achieve because youth move through development in diverse ways and at different rates. Programs must have opportunities for individualized reflection and growth while moving participants through collaborative activities (Bean et al., 2017), which is why youth require a positive problem-solving disposition in order to succeed in YCPS partnerships.

Therefore, youth must be fully prepared with a positive self-consciousness, a sense of community, and a problem-solving disposition if they are to fully partake in YCPS. Kirton (2011) describes how outside or internal influences on a team can cause additional problems, which detract from the focus on the problem at hand or issue the team is working to solve. Kirton (2011) argued that understanding how different individuals operate and being aware of each other's differences aids teams by getting the best out of every member according to the nature of the problem (Jablokow, 2008).

Youth's involvement as equal partners can be an additional problem based on a power differential between youth and adults. During the problem-solving process a group's failure to manage diversity can be detrimental to youth's motivation towards YCPS engagement and the opportunity for a mutually beneficial experience for youth and their community. Practitioners must consider youth's role within the problem-solving process but also analyze the support needed for success. Youth can be equal partners with supportive youth-adult partnerships where the zone of proximal development is examined to ensure that adult partners understand the capabilities of youth and where they may need assistance in order to ensure that youth are not left feeling abandoned or unsupported based on the level of autonomy given to the youth (Kress, 2006). The key to determining the optimal zone is ensuring partnerships provide a safe space for success and failure. Positive reinforcement and opportunities for self-reflection throughout the process enable youth to develop a greater sense of autonomy in the problem-solving process (Nicotera & Bassett, 2015).

Conclusion

In conclusion, youth provide capital within their communities and have the capacity to drive local change and increase community viability (Checkoway & Gutierrez, 2006), and, as

such, they should be included in community problem-solving efforts to ensure that their voices are heard (Brennan, 2008). Youth participation within community development efforts increases opportunities for solutions to 21st century challenges from a more holistic and responsible perspective (Redmond & Dolan, 2016). However, youth need to have the necessary tools and support to be successful in collaborative problem-solving partnerships.

The YCPS conceptual framework provides an outline for developing youth who are motivated and prepared for advancement in their local communities. RDS metatheory, sociocultural theory, and reasoned action approach provide a theoretical foundation for the YCPS model. The YCPS model possesses a predicted developmental process, which incorporates adaptive developmental regulations that enhance the probability of contribution. This normative sequence has multiple action paths in relation to one's biological, sociocultural, and physical environmental subsystems but should be further analyzed to predict probabilities for optimizing inclusive opportunities for youth engagement in community problem solving and citizenship endeavors. Evidence was provided for the inclusion of positive problem-solving disposition to increase AEC and youth's likelihood of participating in community problem-solving efforts. Future research is required to provide further implications for the influence of each construct for youth who are participating in community-based change efforts.

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CHAPTER 6 CONCLUSION

Chapter six includes an overview of the need for the study, objectives, and design. Key findings are then discussed based on objectives and followed by discussion and conclusions of the findings based on each research question and an overall synthesis of the findings from each manuscript. Finally, recommendations for practice and future research are offered based on noteworthy findings.

Need for Study

Community-based issues and problems are increasing in complexity and number and require collaboration and partnerships among diverse teams to foster viable solutions for the future. To diversify these teams, youth should be included as a source of insight and cultural capital (Cargo, Grams, Ottoson, Ward, & Green, 2003). However, community-development efforts rarely utilize the strengths of youth and institute opportunities for true partnerships in community problem solving (Jones, 2009). The inclusion of youth has the potential to develop healthier communities with longevity (Checkoway & Gutierrez, 2006).

Barnett and Brennan (2006) proposed interweaving youth-leadership development, community development, and social change endeavors to build stronger communities. It is known that youth-leadership training has the capacity to advance self-regulation, self-efficacy, and life-skill development including communication, conflict resolution, decision making, initiative, civic engagement, and negotiation skills (Anderson, Sabatelli, and Trachtenberg, 2007; Bean, Harlow, & Kendellen, 2017; Kress, 2006; Reichard et al., 2011). However, little is known about the relationship between ethical views and problem-solving skills and the development of active and engaged citizenship (AEC). By examining variations in demographics, ethical views, and problem-solving disposition in relation to AEC, we can provide youth professionals with

insights to create programs better equipped to prepare youth for engagement in community problem-solving efforts and contribute meaningfully to their communities.

Purpose Statement

The purpose of this study was to explain AEC through the examination of ethical factors, demographics, and problem-solving disposition of teens participating in long- and short-term 4-H leadership-development programs. This study implemented both person- and variable-centered analyses to develop clustering profiles and to determine the influence of ethical factors, demographics, and problem-solving disposition on AEC. This research addressed the following questions and objectives:

Research Questions

1. What is the impact of ethical factors, demographics, and problem-solving disposition on active and engaged citizenship for youth participating in leadership development programs?
2. Are there youth clusters of active and engaged citizenship based on ethical factors, demographics, and problem-solving disposition for youth participating in leadership development programs?
3. What is a model for incorporating community problem solving in the model for active and engaged citizenship of youth?

Methodology

In this study, a non-experimental, ex post facto survey design was used to examine differences between 4-H teens in long- and short-term leadership programs based on demographics, ethical factors, problem-solving disposition, and AEC. The distributed survey included (1) a demographic questionnaire and questions on activity involvement, (2) a shortened

version of the Report Card on the Ethics of American Youth (Josephson Institute of Ethics, 2012), (3) the Active and Engaged Citizenship (AEC) scale (Bobek, Zaff, Li, & Lerner, 2009), and (4) a problem-solving disposition instrument developed from the EMI, Critical Thinking Disposition Assessment (Irani, Rudd, Gallow, Ricketts, Friedel, & Rhoades, 2007). The researcher directly administered the instruments face-to-face on scheduled dates.

The population for this study included all participants, 13 to 19 years of age, in Virginia 4-H teen-leadership programs. The sampling frame included a population sample from participants in 14 strong, year-round (long-term) teen-leadership clubs run through 4-H as identified by the Virginia Cooperative Extension (VCE) state extension specialist for 4-H youth development. From the 14 counties recruited for participation, the researcher collected data from 11 different counties and programs. From the 11 programs, there were 275 potential participants, 199 of whom completed the instrument for a response rate of 72.36%. Additionally, 14 additional counties with upcoming camp-counselor trainings were recruited for comparison. Data was collected from nine of the 14 counties ($n = 60$) with a response rate of 63.16%.

Composite scores were calculated for activity involvement, ethical factors, problem-solving disposition, and AEC. Subscale scores were computed for ethical factors—ethical views, unethical views, and ethical behaviors—and AEC, civic duty, civic skills, neighborhood connection, and civic participation. For the variable-center analyses, the researcher performed statistical tests: Cronbach's alpha test of inter-item reliability, descriptive statistics, t-tests, and step-wise linear regression. Person-center analysis utilized a two-step cluster analysis, followed by a one-way ANOVA based on the developed clusters.

Summary of Findings

Manuscript #1 - Teen Leadership Programs as a Pathway: The Impact of Ethical Factors, Demographics, and Problem-solving Disposition on Active and Engaged Citizenship

The purpose of this study was to explain the impact of ethical factors, demographics, and problem-solving disposition on levels of AEC of teens participating in 4-H leadership programs.

Objective 1 - Describe the ethical factors, demographics, problem-solving disposition, and active and engaged citizenship results for youth participating in leadership-development programs. The participants included 199 youth from long-term 4-H teen-leadership programs and 60 youth from short-term programs. The mean age for youth in long-term programs ($M = 15.42$, $SD = 1.35$) was slightly higher when compared with participants of short-term program ($M = 14.78$, $SD = 1.26$). Most youth in the sample were white female whites enrolled in honors/AP courses who were not Hispanic/Latino. Youth in long-term 4-H teen-leadership programs ($M = 115.88$, $SD = 17.76$) had significantly higher AEC scores than did participants in short-term programs ($M = 109.55$, $SD = 12.26$), $t(260) = 2.58$, $p < .05$. The long-term participants ($M = 50.35$, $SD = 8.71$) yielded significantly higher scores on the civic duty subscale [$t(260) = 3.60$, $p < .05$] in comparison with youth participating in short-term programs ($M = 46.12$, $SD = 4.83$). Participants of the two types of 4-H teen-leadership programs did not differ significantly on levels of activity involvement, ethical factors, problem-solving disposition, civic skills, neighborhood connection, or civic participation.

Objective 2 - Examine the relationship between participants' ethical factors and active and engaged citizenship for youth participating in leadership-development programs. The results of the regression for long-term 4-H teen-leadership members specified that all three predictors explained 15.1% of the variance ($F(3,195)=11.559$, $p<.001$). Ethical views ($\beta = .158$, $p<.05$), unethical views ($\beta = .269$, $p<.001$), and behavior ($\beta = .145$, $p<.05$)

explained scores on the AEC scale. For short-term participants of 4-H teen-leadership programs, two predictors explained 20.3% of the variance ($F(2,57)=7.249$, $p<.01$). Ethical views ($\beta = .254$, $p<.05$) and unethical views ($\beta = .185$, $p<.01$) significantly explained AEC scores.

Objective 3 - Examine the relationship between participant demographics and active and engaged citizenship for youth participating in leadership-development programs. Long-term 4-H teen-leadership programs yielded two demographic predictors that explained 11.2% of the variance ($F(2,196)=12.377$, $p<.001$) for AEC. Activity involvement ($\beta = .261$, $p<.001$) and taking honors/AP courses ($\beta = .180$, $p<.01$) significantly explained AEC scores. Participants of short-term 4-H teen-leadership programs indicated one predictor, activity involvement ($\beta = .366$, $p<.01$) that explained 13.4% of the variance ($F(1,58)=8.988$, $p<.01$) for AEC. Gender, age, grade, race, and Hispanic/Latino ethnicity were excluded from the model and were not predictors of AEC for youth in long-term or short-term 4-H leadership programs.

Objective 4 - Examine the relationship between participants' problem-solving disposition and active and engaged citizenship for youth participating in leadership-development programs. For 4-H teens in long-term programs, problem-solving disposition ($\beta = .530$, $p<.001$) explained 28.1% of the variance ($F(1,197)=77.100$, $p<.001$). For long-term program participants, problem-solving disposition explained variance for in all four subscales: civic duty, civic skills, neighborhood connection, and civic participation. Problem-solving disposition ($\beta = .381$, $p<.01$) explained 14.5% of the variance in AEC scores ($F(1,58)=9.830$, $p<.01$) for participants in short-term 4-H teen leadership programs.

Objective 5 - Determine if ethical factors, demographics, and problem-solving disposition significantly impact active and engaged citizenship for youth participating in leadership-development programs. The results of the regression yielded three predictors that explained 39.6% of the variance ($F(3,195)=42.611$, $p<.001$) for AEC. Results indicated that ethical factors ($\beta = .296$, $p<.001$), problem-solving disposition ($\beta = .476$, $p<.001$), and enrollment in honors/AP courses ($\beta = .140$, $p<.01$) predicted AEC scores. Gender, age, grade, race, Hispanic/Latino ethnicity, and activity involvement were excluded from the model and not predictors of AEC for youth in long-term 4-H leadership programs. Three predictors explained 39.0% of the variance ($F(3,56)=11.937$, $p<.001$) in AEC scores for short-term 4-H teen leadership program participants. Ethical factors ($\beta = .404$, $p<.001$), problem-solving disposition ($\beta = .300$, $p<.01$), and activity involvement ($\beta = .281$, $p<.01$) significantly explained AEC scores. Gender, age, grade, race, Hispanic/Latino ethnicity, and enrolled in honors/AP courses were excluded from the model and not predictors of AEC for 4-H youth participating in short-term leadership experiences.

Manuscript #2 - Profiles of Youth Citizenship: Clusters of Ethical Factors, Demographics, and Problem-solving Disposition

The purpose of this study was to determine if clusters of teens in 4-H leadership programs influence youth participants' AEC. The first objective of this study was to describe AEC, ethical factors, demographic characteristics, and problem-solving disposition. These results are described above in Objective 1 for Manuscript 1.

Objective 2 - Identify clusters of participants based on ethical factors, demographic characteristics, and problem-solving disposition. The results generated five clusters:

- Cluster 1: Cluster one ($n = 82$) consisted of white females from long-term leadership programs enrolled in honors/AP courses. Cluster one had the highest ethical views and activity involvement when compared with the other clusters.
- Cluster 2: Cluster two ($n = 55$) included a mixture of genders and individuals enrolled in honors/AP courses from short-term leadership programs and was the youngest cluster. This cluster was predominately white ($n = 43, 83.6\%$) with 16.4% black youth ($n = 9$). Cluster two had one of the higher problem-solving dispositions but lower ethical views.
- Cluster 3: Cluster three ($n = 45$) included white teens involved in long-term leadership programs not enrolled in honors/AP courses. This cluster had the lowest levels of ethical views, problem-solving disposition, and activity involvement.
- Cluster 4: Cluster four ($n = 40$) consisted of a mixture of races, including black ($n = 20, 50\%$), multiracial ($n = 9, 22.5\%$), Asian ($n = 5, 12.5\%$), Native American ($n = 2, 5\%$), and those who preferred not to state ($n = 4, 10\%$). In this cluster, the majority of youth were involved in long-term ($n = 35, 87.5\%$) teen-leadership programs. Cluster four included a mixture of genders and of those enrolled honors/AP courses.
- Cluster 5: Cluster five ($n = 37$) included white males from long-term leadership programs who take honors/AP courses and have higher ethical views and problem-solving disposition.

Objective 3 - Examine relationships between active and engaged citizenship and identified clusters based on ethical factors, demographic characteristics, and problem-solving disposition. There was a significant effect of cluster membership on total AEC at the $p < .01$ level for the five clusters [$F(4, 254) = 3.76, p = .005$]. Post hoc comparisons designated

that the mean for cluster one ($M = 111.9$, $SD = 9.3$) was significantly different than those of the other clusters. There was also a significant effect of cluster membership on civic duty [$F(4, 254) = 7.08$, $p = .000$]. Post hoc comparisons indicated the mean scores for cluster one ($M = 51.8$, $SD = 7.8$) and cluster four ($M = 51.7$, $SD = 5.8$) were significantly different from those of clusters two ($M = 46.0$, $SD = 4.8$) and three ($M = 46.4$, $SD = 12.4$). Additionally, there was a significant effect of cluster membership on civic skills [$F(4, 254) = 4.41$, $p = .002$]. Post hoc comparisons indicated that the mean score for cluster three ($M = 17.7$, $SD = 5.8$) differed significantly from those of clusters one ($M = 21.3$, $SD = 4.9$) and five ($M = 21.1$, $SD = 4.3$).

Manuscript #3 - Creating a Model for Youth in Community Problem Solving

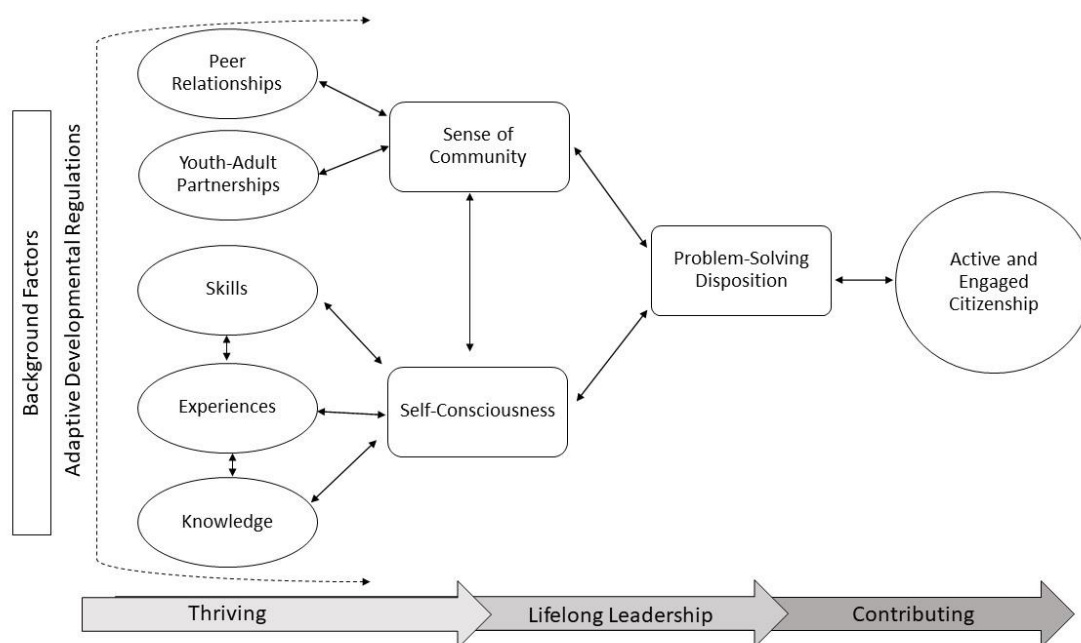


Figure 6-1. Conceptual Model for Youth in Community Problem Solving (YCPS).

This study used findings on the impact of ethical factors, problem-solving disposition, and demographics as well as youth clusters for active and engaged citizens to develop a model for youth in community problem solving. The model is grounded in sociocultural theory and reasoned actioned approach positioned in relational developmental systems (RDS) metatheory.

Additional literature centralized around positive youth development, youth-leadership development, and learning theories provided additional support for the conceptual model for Youth in Community Problem Solving (YCPS) (Figure 6-1).

Discussion and Conclusions

Research Question 1 - What is the impact of ethical factors, demographics, and problem-solving disposition on active and engaged citizenship for youth participating in leadership-development programs?

The results yielded minimal differences between long-term and short-term 4-H teen-leadership programs. Long-term participants had significantly higher scores for AEC and civic duty. However, there were no significant differences in levels of neighborhood connection, civic participation, activity involvement, ethical factors, or problem-solving disposition. Participation in Virginia 4-H long-term teen-leadership programs did not increase character strengths or problem-solving views when compared with short-term trainings. However, activity involvement was only a significant predictor of AEC for short-term participants when ethical factors and problem-solving disposition were also factored in. This could provide implications that other activity involvement provides experiences which also increase leadership opportunities, ethical views, and problem-solving disposition. Roth and Brooks-Gunn (2016) suggest that the impact of extracurricular activities on youth differs based on the type of program, level of involvement, and program structure. Youth who participate heavily in other activities, which include positive and supportive relationships with adults and peers, may be gaining character education and problem-solving experiences to aid in the development of AEC.

Additionally, youth in long-term 4-H teen-leadership programs who were also enrolled in honors/AP courses had significantly higher AEC. This could be based on the incorporation of problem-solving for community issues in classes and programs for gifted youth (Terry,

Bohnenberger, Renzulli, Cramond, & Sisk, 2008). Although, 4-H citizenship development focuses on bolstering youth's competencies for engagement in their communities (4-H National Headquarters, 2011), participants in long-term leadership programs are most likely receiving opportunities to further these skills in their gifted courses.

Ethical factors and problem-solving disposition explained heightened AEC for participants in both long-term and short-term 4-H teen-leadership programs. Providing support for the inclusion of character education and problem-solving experiences in teen-leadership programs bolsters youth's community engagement. The action level of Redmond and Dolan's (2016) concept of youth-leadership development includes using one's leadership skills to solve problems and drive change in their community. Based on reasoned action approach (Fishbein & Ajzen, 2010), individuals with positive views, attitudes, beliefs, and competencies are more likely to engage in a behavior, such as problem solving. Problem solving is related to ethics through the performance virtue, which is a desire to solve complex problems (Baehr, 2017). Therefore, inclusion of both character education and problem-solving opportunities allows for the development of performance virtues and increases youth's likelihood to contribute meaningfully to their communities.

Research Question 2 - Are there youth profiles of active and engaged citizenship based on ethical factors, demographics, and problem-solving disposition for youth participating in leadership-development programs?

Cluster one was comprised of white females from long-term teen-leadership programs who were enrolled in honors/AP courses and had the highest ethical views and activity involvement. This cluster yielded significantly higher scores for overall AEC and differed from cluster five based only on gender. This raises implications for the consideration of gender differentiation in AEC. Often females are expected to contribute, but males are viewed as those

who cause issues in and do not care about their communities (Hall & Coffey, 2007). Therefore, this significant difference may be impacted by more prevalent societal norms, and avenues for overcoming this gender differentiation should be considered in the development of inclusive citizenship curriculum.

Cluster two, which was the only cluster comprised of only short-term program participants, had the lowest levels of civic duty and significantly differed from clusters one and four. This provides support for the role long-term 4-H teen-leadership programs may have on a youth's orientation toward citizenship and community involvement. With mastery (Redmond & Dolan, 2016) and intentional opportunities for planning and decision-making processes (Kress, 2006) as aims of youth leadership, long-term programs should provide youth with increased knowledge and competence for engaging as leaders and community problem solvers. However, there was also clear inference for the impact of enrollment in honors/AP courses as a factor that significantly impacted overall AEC, civic duty, and civic skills.

Cluster three had the lowest reported levels of ethical views, problem-solving disposition, and activity involvement and was comprised of participants in long-term leadership programs who were not enrolled in honors/AP courses. Cluster three yielded the lowest mean for civic skills and significantly differed from clusters one and five, which were of a similar demographic makeup with the exception of enrollment in honors/AP courses. Additionally, cluster three reported significantly lower levels of civic duty when compared with clusters one and four. Based on this finding, it is important to consider exploring the relationship between academic achievement and participation in long-term leadership programs, problem-solving disposition, ethical factors, and AEC. Because gifted courses often include opportunities for the development of problem-solving skills and the creation of action plans (Terry et al., 2008), there may be

implications for a youth's views, attitudes, and beliefs on problem solving based on their overall feeling of competence.

Neighborhood connection and civic participation, which were also both measured with the AEC instrument, did not significantly differ among clusters. This may be due to the program aims and outcomes of 4-H. Members of 4-H are twice as likely to participate and four times more likely to contribute to their communities (Lerner, Lerner, & Colleagues, 2013). This is often attributed to the priority 4-H places on citizenship through their 4-H citizenship initiatives (4-H National Headquarters, 2011). Additionally, 4-H is an organization that has been involved in the development of curriculum for youth-adult partnerships (Zeldin, Christens, & Powers, 2013). These youth-adult partnerships aim in to contribute to a youth's self-worth and neighborhood connection.

Research Question 3 - What is a model for incorporating community problem solving in the model for active and engaged citizenship of youth?

The YCPS model (Figure 6-1) utilized RDS metatheory as a foundation for the inclusion of sociocultural theory and used reasoned action approach as the basis for the conceptual framework. A literature review including learning theories, positive youth development, and youth-leadership development provided support for the model. Findings from this study indicated that participants in long-term leadership programs yielded significantly higher levels of AEC when compared with peers in short-term leadership experiences, which provided support for the lifelong leadership in the model. Additionally, problem-solving disposition and ethical factors were found to be significant predictors of AEC for youth in both short- and long-term leadership programs.

When including youth in collaborative problem-solving efforts with adult partners, appropriate power balances must or should be developed, and youth should be provided with

opportunities for reflection and growth (Bean et al., 2017). To engage meaningfully in these partnerships, youth must develop self-consciousness, a sense of community, and positive problem-solving disposition. Further, teams must be able to overcome Problem B in order to focus on generating meaningful solutions to the problem at hand: Problem A (Kirton, 2011). Problem Bs often encompass group-problem, group-group, individual-group, individual-problem, and individual-individual issues that arise through the collaborative problem-solving process (Kirton, 2011). Power dynamics and ill-preparedness when engaging in youth-adult partnerships may pose Problem Bs in YCPS. Youth-adult partnerships require several core elements: authentic decision making, natural mentors, reciprocal activity, and community connectedness (Zeldin et al., 2013).

Synthesis of Manuscripts

Based on findings from the three manuscripts, additional conclusions can be made on person-centered versus variable-centered analyses and community viability. A variable-centered approach (utilized in Manuscript 1) examines the relationships between independent and dependent variables (Benson, Scales, Hamilton, & Sesma, 2006). The person-centered approach (used in Manuscript 2) recognizes clusters of variables in order to develop subpopulations within the variables (Ciarrochi, Morin, Sahdra, Litalien, & Parker, 2017). These clusters can then be used to evaluate statistical significance for independent variables. By examining differences among clusters, gender was recognized as a factor that impacted AEC and civic duty, with males scoring significantly lower when compared with like females. Additionally, a clearer picture related to enrollment in honors/AP courses emerged, with participants not enrolled having lower ethical views, problem-solving disposition, and activity involvement. These findings were not present through the variable-centered approach. Because person-centered analyses view

participants as heterogeneous and influenced by different variables (Laursen & Hoff, 2006), additional findings related to AEC were uncovered.

Additionally, when youth are viewed as community assets and provided with opportunities to contribute as current leaders, communities and youth benefit. Active and engaged young citizens can play a role in increasing community viability and aiding in the development of flourishing communities (Brennan, 2008). However, to participate in community problem-solving partnerships, youth require avenues to implement and practice specific skills including decision-making skills, stress management, prioritization, delegation, management of conflict, and listening skills (Barnett & Brennan, 2006). Through the development of programs that harvest these skills and promote AEC, youth can become contributors who drive change in their community. This leads to an increase in capable leadership and community sentiment that ultimately increases overall community viability (Hogg, Bush, Rudd, & Seibel, 2016).

Recommendations for Practice

Findings in this study lead to the following recommendations for improvement of: 4-H teen-leadership programs, youth in community problem solving, and youth AEC initiatives:

1. Youth leadership practitioners and 4-H Extension agents can promote AEC in their teen-leadership programs through the development of character and problem-solving skills. Practitioners should incorporate character education and problem-solving experiences to allow youth to increase their character virtues and competency for problem-solving. Youth with more experience in problem solving may develop positive views, attitudes, and beliefs toward problem solving in order to be more likely to engage in their communities. By engaging intergenerationally in collaborative activities that explore

community-based issues, youth will be more prepared to drive change in their communities (Christens & Dolan, 2011).

2. There were no significant differences between problem-solving disposition and ethical factors for participants in long-term 4-H teen-leadership programs when compared with participants of short-term programs. However, long-term or year-round programs provide more experiences for youth to develop these views. Based on sociocultural theory, learned positive behaviors should be influenced by the continuous display of a behavior trait over an extended period of time. Therefore, long-term teen-leadership programs have more opportunities to increase problem-solving disposition and ethical factors. Additionally, Redmond and Dolan (2016) brought attention to a shift in youth's views on leadership to be more collaborative and relational. Extension agents should infuse their 4-H long-term teen-leadership programs with more opportunities for engagement in collaborative activities where reflection on the problem-solving experience and the role of character are explored. Further, current goals of Virginia 4-H teen-leadership programs are centralized around personal and skill development for the future (Price & Elmer, 2015). By focusing on youth as current leaders, practitioners can bolster chances for youth to engage in their communities and increase AEC in young people.
3. Extension professionals and other youth leadership practitioners should consider how gender impacts AEC. Hall and Coffey (2007) provide discourse on gender differentiation for youth citizenship as "much of the current negative and anxious commentary about young people and the 'don't care' culture is implicitly, and sometimes explicitly, directed at young men in particular" (p. 294). This is based on societal expectations for females to contribute and males to be nuisances and noncontributors (Hall & Coffey, 2007).

Therefore, sociocultural development of citizenship views may be impacted by gender and should be considered in curriculum development for inclusive programs. Youth-leadership programs should promote inclusion of both genders and focus on the development of curriculum focused on the intentional engagement of males in their communities.

4. Year-round teen-leadership programs provide opportunities for scaffolding curriculum and for youth to participate in collaborative community problem-solving efforts.

Extension professionals and youth practitioners should explore opportunities for youth to meaningfully engage in their communities outside community service endeavors. These opportunities should ensure that youth have a supportive and safe place to engage in reflection centralized around their own identities (Komives, Owen, Longerbeam, Mainella, & Osteen, 2005) and their community development work.

5. Engaging youth in community problem-solving efforts is not without its challenges.

Adults and organizations often lack an understanding of the role youth can play in community development (Checkoway et al., 2003). Power dynamics may cause obstacles for adult and youth participants and must then be mitigated. Prior to partaking in collaborative partnerships, youth and adults should have a general understanding of adultism—adult-centric perspectives of youth as inferior to adults (Bell, 2003). Based on age youth are the only universal group of individuals who are consistently under the power of others. To mitigate this obstacle, youth and adults must continually communicate regarding power dynamics and the utilization of strengths from all team members. If a team is unable to manage diversity throughout the problem-solving process, it can be detrimental to the community development effort (Kirton, 2011) and

could greatly impact the youth's likelihood to participate in problem solving in the future. Positive reinforcement and opportunities for self-reflection in the process may enable youth to develop a greater sense of autonomy in the problem-solving process (Nicotera & Bassett, 2015).

6. Youth practitioners should ensure that supportive youth-adult partnerships exist where the zone of proximal development is examined to ensure adult partners understand the capabilities of youth and where they may need backing. This will aid youth to not feel abandoned or unsupported based on the amount of autonomy given to the youth (Kress, 2006). The key to determining the optimal zone is ensuring that partnerships provide a safe space for success and failure. The conceptual framework for youth-adult partnerships discerns that authentic decision making, natural mentors, reciprocal activity, and community connectedness are necessary for positive youth-adult partnerships (Zeldin et al., 2013). Adults engaging as equal partners in collaborative community problem-solving with youth need to understand the role they play and must have received training on the incorporation of these core elements in the process.
7. When considering RDS metatheory, it is important to consider how programs are created with the reciprocal relationship between an individual and their context in mind. This includes examining how the environment surrounding youth will impact their development and considering how youth develop differently overtime. This requires assessing program outcomes through various means that consider youth as a heterogenous group. It is important to take into consideration that all program is not one-size-fits-all and should be adapted based on the responsiveness and growth of youth participants. Additionally, 4-H Extension agents should consider those who are not

participating in their programs and consider new recruitment and retention tools for promoting diversity and inclusion in their programs.

Recommendations for Future Research

To further the understanding of AEC for youth, further research should be conducted to explore the following phenomena:

1. Future research and replication of the study should expand the population to youth who are not involved in 4-H. 4-H is an organization that has demonstrated capacity to increase AEC (Lerner et al., 2013). The youth participants in this study did not allow for a great deal of generalizability for youth outside of the 4-H organization. In order to provide further insights on the roles of ethical factors, demographics, and problem-solving disposition in the development of AEC, future research efforts should include participants with a wider range of AEC, problem-solving disposition, and ethical factors. Further, this sample was relatively homogeneous in ethnicity and the majority of participants were enrolled in honors/AP courses. However, the participants were representative of those in programs in 4-H teen-leadership programs in Virginia. A more robust sample would increase the implications of findings.
2. Demographic characteristics did not provide any insights on youths' AEC levels. Reasoned action approach and sociocultural theory implicate that background factors and an individual's culture impact their development. Additional demographic characteristics or protective factors may serve as better predictors in the conceptual models examined in this study. Protective factors are often individual, family, or community-based and are contextually historical, social, and cultural (Crockett & Crouter, 1995). Individual-based factors include those associated with self-esteem and stress management. A positive

family environment including parental monitoring and familial attachment, act as protective factors (Zolkowski & Bullock, 2012). Community-based factors often encompass a sense of belonging, supportive relationships with adults other than one's parents, and religious or spiritual affiliations (American Psychological Association, 2002). These types of demographic characteristics were excluded from this study based on length (the survey took 30 minutes to complete). Future research should consider including different or additional items regarding protective factors to increase understanding of trajectories for AEC development.

3. RDS metatheory postulates individuals develop overtime through different trajectories based on a bidirectional relationship between the individual and their context (Lerner & Overton, 2008). Therefore, it is recommended for an additional study to examine longitudinal trends of youth overtime. Youth's responses may have been biased based on their recent experiences. By measuring youth responses over time, it is not only possible to examine development overtime, but to also consider the role of plasticity (Lerner & Overton, 2008). A longitudinal study with multiple data collection points would aid in corroborating the findings and providing further insight into developmental trajectories for AEC development.
4. 4-H citizenship development focuses on bolstering youth's competencies for engagement in their communities (4-H National Headquarters, 2011); however, participants in long-term leadership programs demonstrated increased positive views of problem-solving and ethics when they were also enrolled in honors/AP courses. This raised additional questions concerning to the role of academic achievement and how experiences in the classroom impacted problem-solving disposition, ethical factors, and AEC. Future

research should focus on exploration of the experiences youth attribute to the development of these competencies in order to learn more about the impacts of 4-H teen-leadership programs.

5. Utilizing previous research, theory, and findings from this study, a model for Youth in Community Problem Solving (YCPS) was developed for future practice. This model should be further explored at each element in relation to the developmental processes. Problem-solving disposition provided implications for higher levels of AEC. However, little is yet known about youth's likelihood and success in collaborative community problem solving based on their problem-solving disposition. Future research is necessary to provide implications and good practices for the success of youth in problem-solving partnerships with adults. A participatory approach with youth and adults involved in these problem-solving partnerships could provide insight to each element in the model and any additional factors to increase the usability of the model. Further, good practices for youth inclusion and success in this process could be developed through a participatory approach.
6. Supportive and safe youth-adult partnerships must be fostered for positive youth experiences in community change efforts (Zeldin et al., 2013), and teams must overcome adultism, external influences, and internal diversity to focus on the community-based problem at hand (Kirton, 2011). Further research should explore the manifestations of these relationships and the role they play not only in the success of youth's engagement in the process but also in the community solution outcomes.
7. Finally, variable-centered and person-centered analyses provide different insights into the impacts variables have on outcomes. From an RDS metatheory perspective, individuals

develop through an accumulation of their past, present, and future experiences (Lerner, 2015), which provides evidence that development is individualistic in nature and that all people react and grow differently within their individual contexts. Future research should continue to utilize both variable-centered and person-centered approaches to maximize development and minimize the probability of negative impacts on youth (Lerner, Bowers, Geldhof, Gestsdóttir, & DeSouza, 2012). An incorporation of both analyses allows researchers to further understand and make more robust conclusions.

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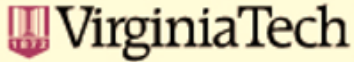
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Appendix A: Internal Review Board Letter of Approval



Office of Research Compliance
Institutional Review Board
North End Center, Suite 4120, Virginia Tech
300 Turner Street NW
Blacksburg, Virginia 24061
540/231-4606 Fax 540/231-0959
email irb@vt.edu
website <http://www.irb.vt.edu>

MEMORANDUM

DATE: January 20, 2018
TO: Rick Rudd, Sarah Ann Bush, Tonya Price
FROM: Virginia Tech Institutional Review Board (FWA00000572, expires January 29, 2021)

PROTOCOL TITLE: Developing Active and Engaged Youth Citizens: An Examination of Ethical Factors, Demographics, and Problem-Solving Disposition

IRB NUMBER: 17-1056

Effective January 20, 2018, the Virginia Tech Institutional Review Board (IRB) approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at: <http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: **Expedited, under 45 CFR 46.110 category(ies) 5,7**
Protocol Approval Date: **January 20, 2018**
Protocol Expiration Date: **January 19, 2019**
Continuing Review Due Date*: **January 5, 2019**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

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An equal opportunity, affirmative action institution

Date*	OSP Number	Sponsor	Grant Comparison Conducted?

* Date this proposal number was compared, assessed as not requiring comparison, or comparison information was revised.

If this IRB protocol is to cover any other grant proposals, please contact the IRB office (irbadmin@vt.edu) immediately.

Appendix B: Youth 18 and Older Recruitment Letter

Hello, my name is Sarah Bush. I am a doctoral candidate at Virginia Tech in the Agricultural, Leadership, and Community Education department. I am studying how different attitudes, values, and behaviors impact youth citizenship. I am inviting you to participate in this study based on your participation in at teen leadership program run through Virginia Cooperative Extension.

Participation in this research includes taking a survey about your views on ethics, problem solving, and citizenship. A few demographic questions are also included in the survey. The survey will take around 30 minutes. Some of the questions in this survey include questions regarding topics, such as: bullying, cheating, stealing, etc. Therefore, you may experience emotional discomfort when responding to the questions regarding sensitive topics.

Results will be prepared for my dissertation, publications, conference presentations, and for improvement of teen leadership programs. All participation is confidential and voluntary. Only individuals with the appropriate consent and assent forms will complete the survey. No identifiable information will be connected to your survey response or utilized in publications or presentations.

To participate:

If you're 18 or older, please bring the signed consent form to your upcoming meeting on [Date]. You may also complete the consent form online at [Qualtrics link].

If you're younger than 18, please bring the signed parent consent and youth assent forms to your upcoming meeting on [Date]. You may also complete the consent form online at [Qualtrics link].

Further details on the study are included on the consent form. I invite you to contact me with any questions or to discuss the study.

Thank you,

Sarah Bush, sabush17@vt.edu, (540) 315-3276
Dr. Tonya Price
Dr. Rick Rudd

Appendix C: Parent Recruitment Letter

Hello, my name is Sarah Bush. I am a doctoral candidate at Virginia Tech in the Agricultural, Leadership, and Community Education department. I am studying how different attitudes, values, and behaviors impact youth citizenship. I am inviting your child to participate in this study based on their participation in a teen leadership program run through Virginia Cooperative Extension.

Participation in this research includes taking a survey about their views on ethics, problem solving, and citizenship. A few demographic questions are also included in the survey. The survey will take around 20 minutes. Some of the questions in this survey include questions regarding topics, such as: bullying, cheating, stealing, etc. Therefore, your child may experience emotional discomfort when responding to the questions regarding sensitive topics.

Results will be prepared for my dissertation, publications, conference presentations, and for improvement of teen leadership programs. All participation is confidential and voluntary. Only individuals with the appropriate consent and assent forms will complete the survey. No identifiable information will be connected to your survey response or utilized in publications or presentations.

To participate, please have your child bring the signed assent and consent form to their upcoming on [Date]. You may also complete the consent and assent forms online at [Qualtrics Link]. Further details on the study are included on the consent form. I invite you to contact me with any questions or to discuss the study.

Thank you,

Sarah Bush, sabush17@vt.edu, (540) 315-3276
Dr. Tonya Price
Dr. Rick Rudd

Appendix D: Youth Recruitment Script

Hello, my name is Sarah Bush. I am a graduate student at Virginia Tech in the Agricultural, Leadership, and Community Education department. I am studying how different attitudes, values, and behaviors impact youth citizenship. You've been invited to participate in this research study.

Participation in this research includes taking a survey about your views on ethics, problem solving, and citizenship. A few demographic questions are also included in the survey. The survey will take around 30 minutes. Some of the questions in this survey include questions regarding topics, such as: bullying, cheating, stealing, etc. Therefore, you may feel uncomfortable when responding to the questions regarding sensitive topics. You are free to withdrawal if you feel uncomfortable.

Results will be prepared for my dissertation, publications, and conference presentations. All participation is confidential and voluntary. Your names will not be connected to your survey responses. There is no compensation for taking part in this study.

You are free to withdraw without penalty at any time. Participation does not impact your relationships with the researchers, Virginia 4-H, or Virginia Tech.

Are there any questions?

At this time, anyone who has completed consent or parental consent and assent forms is invited to complete the survey.

Appendix E: Youth 18 and Older Consent Form

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY Informed Consent for Participants in Research Projects Involving Human Subjects

Consent Form

Identification of Project:

Developing Youth Citizens based on Ethics, Demographics, and Problem Solving

Purpose of the Research:

This research study looks at how different attitudes, values, and behaviors impact youth citizenship. The results from this study may be published or presented at conferences.

Procedures:

You will complete the survey at your next club meeting. The survey will take approximately 30 minutes to complete.

Benefits:

The results of this study will inform teen leadership program improvement. The results will help build youth citizenship and problem solving programs.

Risks and/or Discomforts:

Some of the questions on the survey include topics, such as: bullying, cheating, stealing, etc. You may feel uncomfortable when answering to questions regarding sensitive topics.

Confidentiality:

Names will not be connected with survey responses. The responses will be stored in a locked office of the research team. Responses will only be seen by the research team. The surveys will be examined and reported as large group data. Data will be destroyed after all publications and conference presentations are complete. The Virginia Tech (VT) Institutional Review Board (IRB) may view the study's data for auditing purposes. The IRB is responsible for the oversight of the protection of humans involved in research.

Compensation:

There will be no compensation for taking part in this study.

Freedom to Withdraw:

You are free to decide not to participate or withdraw from the study. Participation will not impact your relationship with the researchers, Virginia 4-H, or Virginia Tech.

Consent, Right to Receive a Copy:

You are being provided this information on the study purpose and a description of participation prior to the time the survey is handed out. You are voluntarily making a decision to participate in this research study.

Opportunity to Ask Questions:

You may ask any questions concerning this research to:

Sarah Bush, sabush17@vt.edu, (540) 315-3276

Should you have any questions or concerns about the study's conduct or your rights as a research subject, or need to report a research-related injury or event, you may contact the Virginia Tech Institutional Review Board at irb@vt.edu or (540) 231-3732.

Subject's Consent:

I have read the Consent Form. I have had all my questions answered. I hereby give my voluntary consent to participate:

Your Signature: _____ Date: _____

Appendix F: Parental Consent Form

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY Informed Consent for Participants in Research Projects Involving Human Subjects

Parent Consent Form

Identification of Project:

Developing Youth Citizens based on Ethics, Demographics, and Problem Solving

Purpose of the Research:

This research study looks at how different attitudes, values, and behaviors impact youth citizenship. The results from this study may be published or presented at conferences.

Procedures:

Your child will complete the survey at your next club meeting. The survey will take approximately 30 minutes to complete.

Benefits:

The results of this study will inform teen leadership program improvement. The results will help build youth citizenship and problem solving programs.

Risks and/or Discomforts:

Some of the questions on the survey include topics, such as: bullying, cheating, stealing, etc. Your child may feel uncomfortable when answering to questions regarding sensitive topics.

Confidentiality:

Names will not be connected with survey responses. The responses will be stored in a locked office of the researcher team. Responses will only be seen by the research team. The surveys will be examined and reported as large group data. Data will be destroyed after all publications and conference presentations are complete. The Virginia Tech (VT) Institutional Review Board (IRB) may view the study's data for auditing purposes. The IRB is responsible for the oversight of the protection of humans involved in research.

Compensation:

There will be no compensation for taking part in this study.

Freedom to Withdraw:

Your child is free to decide not to participate or withdraw from the study. Participation will not impact their relationship with the researchers, Virginia 4-H, or Virginia Tech.

Consent, Right to Receive a Copy:

You are being provided this information on the study purpose and a description of participation prior to the time the survey is handed out. You are voluntarily making a decision for your child to participate in this research study.

Opportunity to Ask Questions:

You may ask any questions concerning this research to:

Sarah Bush, sabush17@vt.edu, (540) 315-3276

Should you have any questions or concerns about the study's conduct or your rights as a research subject, or need to report a research-related injury or event, you may contact the Virginia Tech Institutional Review Board at irb@vt.edu or (540) 231-3732.

Subject's Consent:

I have read the Parent Consent Form. I have had all my questions answered. I hereby give my voluntary consent to participate:

Parent Signature: _____ Date: _____

Appendix G: Youth Assent Form

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY Informed Consent for Participants in Research Projects Involving Human Subjects

Youth Assent Form

Identification of Project:

Developing Youth Citizens based on Ethics, Demographics, and Problem Solving

Purpose of the Research:

This research study looks at how different attitudes, values, and behaviors impact youth citizenship.

Procedures:

You will complete the survey at your next club meeting. The survey will take approximately 30 minutes to complete.

Benefits:

This study will inform teen leadership program improvement. The results will help build youth citizenship and problem solving programs.

Risks and/or Discomforts:

Some of the questions on the survey include topics, such as: bullying, cheating, stealing, etc. You may feel uncomfortable when answering to questions regarding sensitive topics.

Confidentiality:

Names will not be connected with survey responses. The responses will be stored in a locked office of the research team. Responses will only be seen by the research team. The surveys will be examined and reported as large group data.

Compensation:

There will be no compensation for taking part in this study.

Freedom to Withdraw:

You are free to decide not to participate or withdraw from the study. Participation will not impact your relationship with the researchers, Virginia 4-H, or Virginia Tech.

Consent, Right to Receive a Copy:

You are being provided this information on the study and your role prior to the time the survey is handed out. You are voluntarily deciding to participate in this research study.

Opportunity to Ask Questions:

You may ask any questions concerning this research to:
Sarah Bush, sabush17@vt.edu, (540) 315-3276

Subject's Consent:

I have read the Assent Form. I have had all my questions answered. I hereby give my voluntary consent to participate:

Your Signature: _____ Date: _____

Appendix H: Survey

Demographic Questionnaire

1. What is your gender?
2. What grade are you in?
3. What is your age?
4. What is your race?
 - ☐ Asian, Asian American or Pacific Islander, including Chinese, Japanese and others.
 - ☐ Black or African American
 - ☐ Hispanic or Latino/a, including Mexican American, Central American, and others
 - ☐ White, Caucasian, Anglo, European American; not Hispanic
 - ☐ American Indian/Native American
 - ☐ Multiethnic or multiracial (more than one race or ethnicity, please specify below)
 - ☐ Native Hawaiian or Pacific Islander
 - ☐ Other (write in): _____
 - ☐ Prefer not to state
5. Are you Hispanic or Latino ethnicity?
 1. No
 2. Yes
 3. Prefer not to state
6. Do you expect to attend college?

7. Activity Participation

Please mark the answer that best describes your participation. If you have not participated or no longer participate in the activity please mark “Never”.

	Never	Once a month or less	A couple times a month	Once a week	A few times a week	Every day
4-H Club						
Other Community Youth Activities						
Varsity Sports						
Other Sports Activities						
Church/Religious Activities						
Serviced-based Organizations/Volunteering						
School Clubs						
Mentoring/Peer Advising/Tutoring						
	Yes			No		
Attended 4-H Camp						
Serve in a leadership position?						
Honors/AP class?						
Work eight or more hours per week?						

National Report Card: The Ethics of American Youth

What do you think?

	Strongly Agree	Agree	Disagree	Strongly Disagree	No Opinion
In relationships, trust and honesty are essential.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the real world, successful people do what they have to do to win, even if others consider it cheating.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A person has to lie or cheat sometimes in order to succeed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
People who are willing to lie, cheat, or break the rules are more likely to succeed than people who are not.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It's important to me that people trust me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It's not worth it to lie or cheat because it hurts your character.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am prejudiced against certain groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
It's not cheating if everyone is doing it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
People should play by the rules even if it means they lose.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied with my own ethics and character.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

From your personal perspective, how important to you is each of the following

	Essential	Very Important	Moderately Important	Unimportant	No Opinion
Being physical attractive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being popular	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having good moral character	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being wealthy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being charitable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being thought of as ethical and honorable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My religion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helping others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having trusting personal relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Treating others with respect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being treated with respect	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Being famous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Living up to the standards of my religion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pleasing my parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Select the option to indicate how many times you did these things in the past year.

	Never	Only Once	Two or More Times
Lied to a parent about something significant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lied to a teacher about something significant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Copied an Internet document for a classroom assignment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cheated during a test at school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Copied another's homework	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stole something from parents or relatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stole something from a friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stole something from a store	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bullied, teased, or taunted someone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used racial slurs or insults	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mistreated someone because he or she belonged to a different group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hit a person because I was angry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did things in violation of my religious beliefs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cheated or bent the rules to win in sports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Been bullied, teased, or taunted in a way that seriously upset me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suffered the prejudice of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If people you know were asked to list the most ethical people they know, how many would put you on their list?

- None
- Almost None
- Half
- Most
- Almost All

How many questions on this survey did you answer with complete honesty?

- All but 6-10
- All but 3-5
- All but 1 or 2
- All

Adapted from:

Josephson Institute Center for Youth Ethics. (2012). *2012 Report Card on the Ethics of American Youth*. Retrieved from <https://charactercounts.org/wp-content/uploads/2014/02/ReportCard-2012-DataTables>.

Problem-Solving Views

Directions: Indicate how much you agree or disagree with each numbered statement by circling the appropriate number: 1 = Strongly disagree, 2 = Disagree, 3 = Neither Disagree or Agree, 4 = Agree, 5 = Strongly agree.

	SD	D	U	A	SA
1. I look for opportunities to solve problems.	1	2	3	4	5
2. I am interested in many problems.	1	2	3	4	5
3. I can relate to a wide variety of problems.	1	2	3	4	5
4. I enjoy finding answers to challenging problems.	1	2	3	4	5
5. I am a good problem solver.	1	2	3	4	5
6. I am confident that I can find solutions to problems.	1	2	3	4	5
7. I can apply my knowledge to a wide variety of problems.	1	2	3	4	5
8. I can explain problems clearly.	1	2	3	4	5
9. I ask questions when trying to understand a problem.	1	2	3	4	5
10. I present problems clearly.	1	2	3	4	5
11. I keep on working on problems until I get them right.	1	2	3	4	5

Active and Engaged Citizenship (AEC) Scale

How important is each of the following to you in your life?

	Not Important				Extremely Important
1. Helping to reduce hunger and poverty in the world	1	2	3	4	5
2. Helping to make sure all people are treated fairly	1	2	3	4	5
3. Helping to make the world a better place to live in	1	2	3	4	5
4. Helping other people	1	2	3	4	5
5. Speaking up for equality (everyone should have the same rights and opportunities)	1	2	3	4	5

How much do you agree or disagree with each of the following statements?

	Strongly Disagree				Strongly Agree
6. It's not really my problem if my neighbors are in trouble and need help	1	2	3	4	5
7. I believe I can make a difference in my community	1	2	3	4	5
8. I often think about doing things so that people in the future can have things better	1	2	3	4	5
9. It is important to me to contribute to my community and society	1	2	3	4	5

How well does each of these statements describe you

	Not Well				Very Well
10. When I see someone being taken advantage of, I want to help them	1	2	3	4	5
11. When I see someone being treated unfairly, I don't feel sorry for them	1	2	3	4	5
12. I feel sorry for other people who don't have what I have	1	2	3	4	5

If you found out about a problem in your community that you wanted to do something about (for example, illegal drugs were being sold near a school, or high levels of lead were discovered in the local drinking water), how well do you think you would be able to do each of the following activities?

	<u>Definitely</u> <u>Can't</u>	Probably Can't	Maybe	Probably Can	<u>Definitely</u> <u>Can</u>
13. Contact a newspaper, radio, or TV talk show or post on social media to express your opinion on an issue	1	2	3	4	5
14. Contact an elected official about the problem	1	2	3	4	5
15. Contact or visit someone in government who represents your community	1	2	3	4	5
16. Write an opinion letter to a local newspaper or express your view on social media	1	2	3	4	5
17. Express your views in front of a group of people	1	2	3	4	5
18. Sign an email or mail petition	1	2	3	4	5

How much do you agree or disagree with each of the following statements?

	Strongly Disagree				Strongly Agree
19. Adults in my town or city listen to what I have to say	1	2	3	4	5
20. Adults in my town or city make me feel important	1	2	3	4	5
21. In my town or city, I feel like I matter to people	1	2	3	4	5
22. In my neighborhood, there are lots of people who care about me	1	2	3	4	5
23. If one of my neighbors saw me do something wrong, he or she would tell one of my parents	1	2	3	4	5
24. My teachers really care about me	1	2	3	4	5

How often do you do each of the following activities?

	Never	Seldom	Sometimes	Often	Very Often
25. Help make your city or town a better place for people to live	1	2	3	4	5
26. Help out at your church, synagogue or other place of worship	1	2	3	4	5
27. Help a neighbor	1	2	3	4	5
28. Help out at your school	1	2	3	4	5

29. During the last 12 months, how many times have you been a leader in a group or organization?

Never

☐

Once

☐

Twice

☐

3-4 Times

☐

5 or More Times

☐

Adapted from:

Zaff, J., Boyd, M., Li, Y., Lerner, J. V., & Lerner R. M. (2010). Active and engaged citizenship: Multi-group and longitudinal factorial analysis of an integrated construct of civic engagement. *Journal of Youth and Adolescence*, 39(7), 736-750.

Appendix I: Data Collection Schedule and Response Rates

Control County	Potential Participants	Number of Participants	Percentage
1.1	20	13	65.00
1.2	38	25	65.79
1.3	4	2	50.00
1.4	25	21	84.00
1.5	12	12	100.00
1.6	9	9	100.00
1.7	30	19	63.34
1.8	32	32	100.00
1.9	18	10	55.56
1.10	67	38	56.72
1.11	20	18	90.00
Total	275	199	72.36
Comparison County/Cluster			
2.1	40	23	57.50
2.2	27	16	59.26
2.3	28	21	75.00
Total	95	60	63.16
Overall Total	370	259	70.00

Appendix J: Differences between Active and Engaged Citizenship (AEC) and Ethical Factors

Differences between Active and Engaged Citizenship (AEC) and Ethical Factors by Long-term or Short-term 4-H Teen Leadership Program

	Group					
	Long-term (n=199)			Short-term (n=60)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Total AEC Score						
Ethical Views	.610	.273	.158*	.661	.269	.310*
Unethical Views	.710	.177	.269*	.426	.186	.275*
Behavior	.455	.217	.145*	.115	.276	.052
R ²	.151			.205		
F	11.559*			4.820*		
Civic Duty Subscale						
Ethical Views	.357	.140	.188*	.105	.102	.126
Unethical Views	.156	.091	.121	.293	.070	.480*
Behavior	.055	.112	.036	.046	.104	.053
R ²	.064			.267		
F	4.481*			6.810*		
Civic Skills Subscale						
Ethical Views	.058	.087	.050	.246	.107	.303*
Unethical Views	.118	.056	.149*	.105	.074	.179
Behavior	.133	.069	.141	-.022	.110	-.027
R ²	.053			.133		
F	3.631*			2.871*		
Neighborhood Connection Subscale						
Ethical Views	.029	.082	.026	.144	.111	.180
Unethical Views	.138	.054	.179*	-.001	.077	-.002
Behavior	.198	.065	.217*	.055	.114	.066
R ²	.087			.044		
F	6.178*			.859		
Civic Participation Subscale						
Ethical Views	.164	.068	.164*	.176	.094	.252
Unethical Views	.270	.044	.395*	.057	.065	.112
Behavior	.051	.054	.063	.069	.096	.095
R ²	.219			.106		
F	18.274*			2.210		

Note. $p < .05$

Appendix K: Differences between AEC and Demographic Characteristics

Differences between Active and Engaged Citizenship (AEC) and Demographic Characteristics by Long-term or Short-term 4-H Teen Leadership Program

	Group					
	Long-term (n=199)			Short-term (n=60)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Total AEC Score						
Gender	1.857	2.552	.049	6.822	3.413	.253
Age	-1.635	2.273	-.124	-2.880	2.745	-.297
Grade Level	.761	2.290	.058	4.288	2.971	.404
Race	.588	1.184	.043	-.144	1.334	-.011
Hispanic/Latino	.817	3.530	.019	-5.552	8.726	-.082
Honors/AP Courses	7.590	2.750	.198*	1.620	3.172	.064
Activity Involvement	.704	.184	.267*	.732	.256	.374*
R ²	.122			.226		
F	3.804*			2.164*		
Civic Duty Subscale						
Gender	2.462	1.285	.133	2.931	1.430	.276
Age	-1.083	1.145	-.168	-1.214	1.150	-.318
Grade Level	.533	1.153	.083	1.834	1.244	.439
Race	.930	.596	.138	-.510	.559	-.123
Hispanic/Latino	.743	1.777	.036	-2.636	3.655	-.099
Honors/AP Courses	3.532	1.385	.187*	.781	1.329	.078
Activity Involvement	.098	.092	.076	-.019	.107	-.024
R ²	.075			.123		
F	2.226*			1.040		
Civic Skills Subscale						
Gender	-.030	.769	-.003	2.384	1.277	.232
Age	.336	.685	.085	.075	1.027	.020
Grade Level	-.101	.690	-.026	.584	1.112	.145
Race	-.486	.357	-.117	-.218	.499	-.055
Hispanic/Latino	.919	1.064	.072	.210	3.266	.008
Honors/AP Courses	3.090	.829	.267*	3.188	1.187	.329
Activity Involvement	.084	.055	.130	.165	.096	.222
R ²	.121			.251		
F	3.759*			2.485*		
Neighborhood Connection Subscale						
Gender	-.674	.777	-.062	-.033	1.366	-.003
Age	-.264	.692	-.069	-1.685	1.098	-.461
Grade Level	-.119	.697	-.031	1.443	1.189	.361
Race	-.107	.360	-.027	.148	.534	.037
Hispanic/Latino	-.751	1.075	-.061	-1.369	3.492	-.054
Honors/AP Courses	.220	.837	.020	-.542	1.269	-.057
Activity Involvement	.109	.056	.141	.246	.103	.334*
R ²	.041			.125		
F	1.155			1.057		
Civic Participation Subscale						
Gender	.351	.569	.036	2.026	.934	.229*
Age	-.556	.507	-.163	-.09	.751	-.034
Grade Level	.399	.511	.117	.376	.813	.108
Race	.168	.264	.047	.540	.365	.157
Hispanic/Latino	.155	.787	.014	-2.958	2.388	-.133
Honors/AP Courses	.458	.613	.046	.868	.868	-.241
Activity Involvement	.400	.041	.584*	.070	.070	.609*
R ²	.354			.460		
F	14.931*			6.334*		

Note. $p < .05$

Appendix K: Differences between Active and Engaged Citizenship (AEC) and Problem-solving Disposition

Differences between Active and Engaged Citizenship (AEC) and Problem-solving Disposition by Long-term or Short-term 4-H Teen Leadership Program

	Group					
	Long-term (n=199)			Short-term (n=60)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Total AEC Score	1.267	.144	.530*	.747	.238	.381*
R ²	.281*			.145		
F	77.100			9.830*		
Civic Duty Subscale	.512	.075	.437*	.184	.098	.238
R ²	.191			.057		
F	46.485*			3.496		
Civic Skills Subscale	.268	.048	.372*	.226	.093	.303*
R ²	.138			.092		
F	31.666*			5.844*		
Neighborhood Connection Subscale	.232	.047	.334*	.220	.093	.298*
R ²	.111			.089		
F	24.716*			5.671		
Civic Participation Subscale	.216	.041	.349*	.135	.083	.210
R ²	.122			.210		
F	27.280*			2.685		

Note. p < .05

Appendix L: Summary of Simple Regression Analyses for Variables Explaining 4-H Teen's in Long-term and Short-term Leadership Programs by Subscale

Summary of Simple Regression Analyses for Variables Explaining 4-H Teen's in Long-term and Short-term Leadership Programs Civic Duty

	Group					
	Long-term (n=199)			Short-term (n=60)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Gender	1.622	1.193	.088	1.861	1.361	.175
Age	-.338	1.046	-.052	-.587	1.080	-.154
Grade Level	-.179	1.045	-.028	.838	1.191	.201
Race	.929	.535	.128	-.166	.534	-.040
Hispanic/Latino	.240	1.595	.012	-1.862	3.374	-.070
Honors/AP Courses	2.890	1.247	.153*	.374	1.307	.037
Activity Involvement	-.058	.087	-.045	-.054	.100	-.070
Ethical Factors Total	.116	.053	.151*	.151	.049	.391*
Problem-solving Disposition	.484	.075	.413*	.146	.107	.177
R ²	.265			.286		
F	7.567*			2.226*		

Note. $p < .05$

Summary of Simple Regression Analyses for Variables Explaining 4-H Teen's in Long-term and Short-term Leadership Programs Civic Skills

	Group					
	Long-term (n=199)			Short-term (n=60)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Gender	-.586	.736	-.052	1.685	1.274	.164
Age	.794	.645	.200	.513	1.011	.139
Grade Level	-.517	.644	-.131	-.106	1.115	-.026
Race	-.478	.330	-.155	-.001	.501	.000
Hispanic/Latino	.675	.984	.053	.709	3.159	.028
Honors/AP Courses	2.723	.769	.236*	2.979	1.224	.307*
Activity Involvement	-.004	.054	-.005	.144	.094	.193
Ethical Factors Total	.082	.033	.173*	.105	.046	.280*
Problem-solving Disposition	.238	.047	.330*	.084	.100	.113
R ²	.257			.330		
F	7.280*			2.737*		

Note. $p < .05$

Summary of Simple Regression Analyses for Variables Explaining 4-H Teen's in Long-term and Short-term Leadership Programs Neighborhood Connection

	Group					
	Long-term (n=199)			Short-term (n=60)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Gender	-1.437	.739	-.131	-.900	1.348	-.089
Age	.319	.648	.083	-.153	1.069	-.420
Grade Level	-.616	.647	-.161	1.144	1.180	.286
Race	-.086	.331	-.021	.533	.529	.135
Hispanic/Latino	-.910	.988	-.079	-.664	3.342	-.026
Honors/AP Courses	-.205	.773	-.018	-1.591	1.295	-.166
Activity Involvement	.009	.054	.011	.202	.099	.274*
Ethical Factors Total	.118	.033	.259*	.049	.049	.133
Problem-solving Disposition	.216	.047	.331*	.261	.106	.354*
R ²	.199			.234		
F	5.216*			1.698		

Note. $p < .05$

Summary of Simple Regression Analyses for Variables Explaining 4-H Teen's in Long-term and Short-term Leadership Programs Civic Participation

	Group					
	Long-term (n=199)			Short-term (n=60)		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Gender	-.315	.541	-.032	1.284	.891	.145
Age	-.072	.474	-.021	.228	.707	.072
Grade Level	.003	.474	.001	-.176	.780	-.051
Race	.192	.243	.054	.808	.350	.235
Hispanic/Latino	.025	.724	.002	-2.400	2.211	-.108
Honors/AP Courses	.128	.566	.013	-2.491	.857	-.298*
Activity Involvement	.323	.040	.471*	.362	.066	.564*
Ethical Factors Total	.107	.024	.262*	.085	.032	.263*
Problem-solving Disposition	.132	.034	.212*	.141	.070	.219*
R ²	.460			.558		
F	17.920*			7.012*		

Note. $p < .05$