THE ROLE OF THE TENNESSEE 4-H SPECIALIST

AS PERCEIVED BY 4-H AGENTS

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A Dissertation Submitted to the Faculty of the University of
Tennessee at Chattanooga in Partial Fulfillment
Of the Requirements of the Degree
Of Doctor of Education: Learning and Leadership

The University of Tennessee at Chattanooga
Chattanooga, Tennessee

May 2023

ABSTRACT

The primary purpose of this study was to examine the perception of 4-H agents in terms of the role of the state level Extension 4-H specialist. The population included 225 county level 4-H agents employed by either University of Tennessee or Tennessee State University Extension. Data analyses for this study included an examination of demographic factors and 13 questions related to perception (quantitative) as well as three open ended questions (qualitative). Five research questions were examined to determine the perceived role of the 4-H specialists from the perspective of the current 4-H agents and identify what differences exist between role perceptions of the specialist and generational or demographic differences among the agents. The questions were:

- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different ages of 4-H agents?
- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different genders of 4-H agents?
- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different years of experience of 4-H agents?
- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different geographical locations of 4-H agents?
- How do 4-H agents perceive that Extension 4-H Specialists are performing their duties?

The quantitative results of this study, gleaned from research questions 1 – 4, concluded there was no significant difference in perception of the role of the 4-H specialist due to age, gender, years of experience, nor geographical location of the respondent. Additionally, the open-ended questions, which addressed research question five, provided mixed responses. Some respondents indicated that the Extension 4-H Specialists were performing their duties well. Other respondents provided feedback and methods for improvement.

DEDICATION

This dissertation has been a true labor of love. There are so many people who deserve to be acknowledged here. I want to thank my parents, who were a constant source of encouragement for me. I also want to thank my wife Julie, who practiced great patience during this process. My closest friends, family, and co-workers are all appreciated as they asked me, sometimes a little too often, how my dissertation was coming along. Each of these people encouraged me and helped push me to the finish line.

ACKNOWLEDGEMENTS

A special thanks is due to my amazing committee. These academic leaders provided me feedback, challenged me, and helped guide me throughout this process. I would like to thank my chair, Dr. David Rausch, my methodologist, Dr. Beth Crawford, and committee members, Dr. Valerie Rutledge, and Dr. Izetta Slade.

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CHAPTER I

INTRODUCTION

The passage of the federal legislation known as the Smith-Lever Act established the Cooperative Extension System in 1914 (Gould, Steele, & Woodrum, 2014). This act initiated a 3-tier partnership among county government, state land-grant institutions, and the United States (U.S.) Department of Agriculture to provide research-based information to farmers, landowners, and homeowners (Gould et al., 2014). According to Dr. Richard Clark, former assistant dean of the University of Tennessee Extension, the primary focus of the Cooperative Extension System is to deliver educational programs through outreach in four program areas: agriculture, family and consumer sciences, 4-H youth development, which stands for Head, Heart, Hands, and Health, and community resource development (R. W. Clark, personal communication, January 21, 2016). In Tennessee, the state's two land-grant universities, the University of Tennessee and Tennessee State University, manage the Cooperative Extension Program. The University of Tennessee's program is known as the University of Tennessee Extension (UT Extension), while Tennessee State University's program is known as the Tennessee State University Cooperative Extension Program (TSU Cooperative Extension Program).

The youth outreach component of Cooperative Extension is 4-H youth development. With the largest reach of any program area within USDA, 4-H is the largest nonformal youth development program in the nation, reaching more than six million youth in the United States and over one million in more than 50 countries worldwide ("4-H Global Network," 2015). In

Tennessee, the organization provides information and educational opportunities for more than 168,000 youth aged nine to 19 ("Tennessee 4-H Facts and Figures," 2018). A state director for 4-H and a team of seven state-level Extension 4-H specialists, commonly known as the state 4-H staff, oversee the Tennessee 4-H program (Stokes, 2018).

The newest research on the needs of Tennessee's youth informs the programmatic direction of these state-level 4-H specialists. The specialists, in turn, use this information to design programs and develop literature for young people, which county level 4-H agents deliver. These county 4-H agents implement programs developed and organized by the state 4-H staff in local communities and direct educational programs in individual counties, while the state staff provide state-level direction. County agents are responsible for planning, implementing, evaluating, and reporting county-based Extension programs in their respective county ("Handbook for Agents," 2018).

State-level 4-H specialists in Tennessee do not have direct supervision of the county-level 4-H agents. These specialists do provide programmatic support for the 4-H agents. Major roles of state 4-H specialists include conducting outreach work, providing training and professional development, obtaining financial resources through grant projects, and offering curriculum development expertise ("Handbook for Agents," 2018).

State-level specialists are not limited to 4-H youth development. All departments within the University of Tennessee Institute of Agriculture employ Extension specialists. The aforementioned specialists perform tasks including training for Extension agents, researching trends in the respected disciplines, and conducting outreach work. These specialists, often referred to as subject matter specialists, are specialized in their area, focusing on a specific niche

such as turf grass management, human nutrition, and family economics (R.T. Burns, personal communication, August 23, 2018).

Unlike the subject matter specialists, the roles and responsibilities of Extension 4-H specialists encompass more than one specific subject area. The 4-H specialists have statewide responsibility for 4-H programs that include many subjects. With 27 unique project offerings for youth involved in the Tennessee 4-H program, state-level Extension 4-H specialists have responsibility for a broad range of topics within those projects ("4-H Project Areas," 2018).

Statement of the Problem

At the University of Tennessee, each Extension employee has a designated position description. These position descriptions give general guidance for the overall work of the 4-H specialist. These positions include general work duties assigned to each specialist but also include a category that includes “all other duties as assigned”, which often accounts for other tasks that come up throughout the year and could be more episodic in nature. (Toman, 2018). While position descriptions give guidance, consultations with the state 4-H director determine shifts in responsibilities, and new assignments and may occur throughout the year, which could lead to challenges in full understanding of the job responsibilities. (H.D. Loveday, personal communication, October 22, 2018).

A University of Tennessee study, conducted in 1994, addressed the responsibilities of the state-level 4-H specialist. This study was conducted by Carver (1994) as part of the requirement to fulfill her master’s degree. Findings from this study indicated that ambiguity had led to conflicting thoughts around the roles and responsibilities of the state level extension 4-H

specialists from multiple levels of the organization, including the county, region, and state. These challenges have compounded over the years (Carver, 1994).

In other words, this vagueness has presented challenges related to those responsibilities of state-level 4-H specialists, and which specialist is ultimately responsible for specific programs.

Related to change, county 4-H agents have expressed a need for Cooperative Extension to expand offerings to fit new and changing client needs. Cooperative Extension, the educational outreach component of the U.S. Department of Agriculture, the land-grant university, and county government, provides research-based information to citizens in every county in the United States. According to Harriman and Daugherty (1992), the success of the Extension program was dependent on dedicated Extension faculty and staff who are committed to being innovative and taking risks.

According to King (2018) Professor Emeritus at Oregon State University, Extension faculty and leadership often shortsightedly focus on specific technology rather than the impact those technologies might have on the user. Important considerations that Extension specialists must contemplate include:

- The implementation of this technology will need to help learners be more successful.
- New technology will allow Extension to reach more people.
- Technology will need to make Extension programs more competitive in the information marketplace. (King, 2018, p. 1)

In addition to the opportunity to be innovative, the demographics of the Extension workforce should be considered when discussing the role of the Extension specialist. The Baby Boomer generation, those born between 1946 and 1964 is nearing the age of retirement, and individuals who are part of Generation X, having been born between 1965 and 1980, are mid-to-

late career (P. Taylor, 2014). Millennials, also known as Generation Y, were born between 1981 and 1996. With more of these individuals in the workforce, Extension will have to evaluate how business should be conducted in order to reach this new generation of workers (Gordon & Steele, 2005; P. Taylor, 2014). For the benefit of newly hired 4-H agents entering the workforce, University of Tennessee Extension administration has indicated that certain skills and attributes are critical to the success of the 4-H agent. These include an understanding of organizational culture, networking, and professional and personal growth during their first three years on the job. Additional critical skills consist of grant writing, management, communication and teaching techniques, marketing, and volunteer management (Brodeur, Craig, Haile, Higgins, & Galindo-Gonzalez, 2011).

Purpose of the Study

This study investigated the role of the state-level program experts, known as 4-H specialists, as perceived by field-based county Extension 4-H agents. This study determined participants' perceptions of the role of the specialists. The findings derived from the population of 4-H agents aided in clarifying the role and responsibilities of the 4-H specialists. Additionally, the study assisted in identifying a list of responsibilities that 4-H specialists should perform to benefit the 4-H agents and the county 4-H program.

The timing of this study is especially important as major changes have occurred in the 4-H Youth Development department in the past five years. In 2015, the University of Tennessee administration decided to combine the 4-H Youth Development Department at the University of Tennessee and the Agricultural Leadership, Education, and Communications (ALEC) Department at the University of Tennessee, Knoxville. The ALEC academic department is

responsible for higher education academic program concentrations in agricultural communication, education, Extension, and leadership ("ALEC," 2018). The newly formed department was responsible for providing overall guidance to 4-H programs in Tennessee as well as undergraduate and graduate programs of study until the two units were separated in September 2019. Given the recent transition, this study helped to inform new and recently modified roles and responsibilities.

Research Questions

The purposes of this research study were to (a)` determine the perceived role of the 4-H specialists from the perspective of the current 4-H agents and (b) identify what differences exist between role perceptions of the specialist and generational or demographic differences among the agents. Five research questions guided this study:

- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different ages of 4-H agents?
- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different genders of 4-H agents?
- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different years of experience of 4-H agents?
- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different geographical locations of 4-H agents?
- How do 4-H agents perceive that Extension 4-H specialists are performing their duties?

Theoretical Framework

Stakeholder theory will guide this study. This theory states that a value system plays a key role in how business is conducted (Freeman, 2004). According to Frooman (1999), consideration should be given to the relationship that exists between the organization and the stakeholder as well as the power that arises from it. Individuals within an organization who have been given an opportunity to provide input into the organization's functions may feel more empowered as a result.

Generational theory will also guide this study. According to Howe (2007), generations are shaped by proceedings or situations according to which phase of life its members inhabit at the time. As each generation ages into the next phase of life, its attitudes and behaviors mature (Howe & Strauss, 2007). As it relates to the workplace, generational differences in work values are what employees believe to be right or wrong (Wey Smola & Sutton, 2002).

Related to roles, the state-level 4-H specialist is responsible for providing specific programmatic leadership to the 4-H program and for supporting 4-H work across the state ("Handbook for Agents," 2018). This study will investigate how the perception of the 4-H specialist's role may vary based on the respondent's characteristics: generation, gender, geographic location, and years of experience. The researcher anticipates that study findings will help advance the Tennessee 4-H program by providing insight into the specific role of the state-level 4-H specialist. Figure 1.1 illustrates the dependent and independent variables within the scope of this research study.

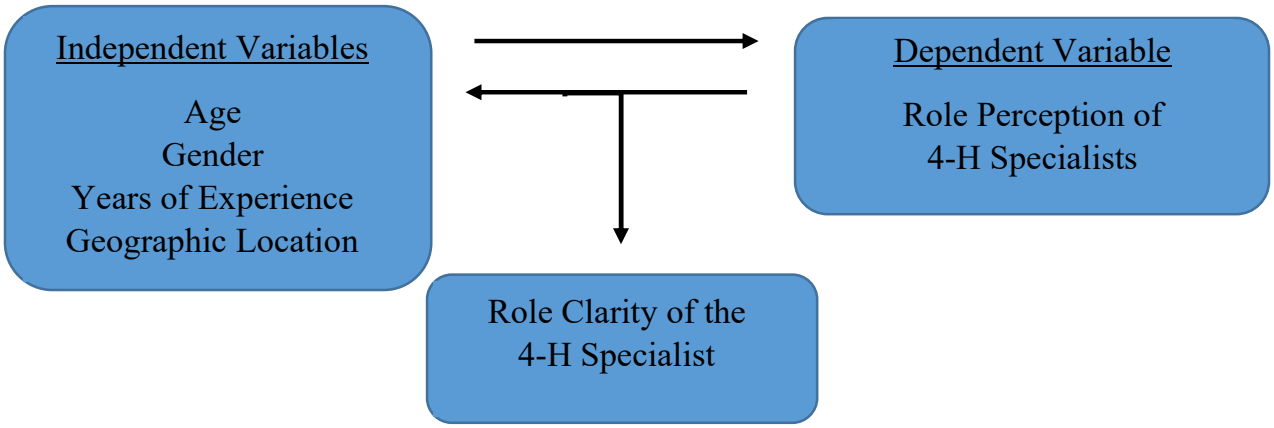

Figure 1.1 Variables considered in the proposed research

Rationale for the Study

According to Eric Spell, president of AgCareers.com, two unique viewpoints of accountability exist in the workplace (Spell, 2015). The first perspective is to be held liable for actions. The second standpoint is a readiness to claim complete ownership for the direct results of actions resulting in one's involvement both individually and cooperatively with others (Spell, 2015).

As stated in a University of Tennessee study, conducted in 1994, role ambiguity is a challenge among 4-H specialists (Carver, 1994). One recommendation that came from this study included a need for clearer information regarding the role of the 4-H specialists. This recommendation, according to the study, will help keep the 4-H program current and successful (Carver, 1994).

Steve Sutton, 4-H Director Emeritus at the University of Tennessee, indicated that the 4-H specialist provides state-level expertise and serves as a resource person for 4-H agents (S.R. Sutton, personal communication, July 6, 2015). Along with this responsibility, each state 4-H

specialist also disseminates information to the county 4-H agent for use in working with local clientele. The county-level 4-H agents are generalists and are responsible for many broad areas in their county's educational programs. Primary tasks of 4-H agents are to deliver youth educational programs and to work directly with local clientele. Overall, Extension agents must be well-versed in a variety of topics ranging from nutrition to animal science to meet the needs of their audience (S.R. Sutton, personal communication, July 6, 2015).

Extension 4-H specialists, who have previously served in the role of a county 4-H agent, may bring to the position a stronger understanding of the county 4-H agents' needs compared to specialists who have not worked in that role. This particular situation lends itself to divided ideas about the priorities of 4-H county programming as well as the needs of a county 4-H agent. These divided ideas stem from the perspectives of both the specialist and the 4-H agent. The results of this study may provide data to clearly demonstrate the needs of county Extension 4-H agents related to the resources provided by the Extension 4-H specialists working to support the 4-H program (S.R. Sutton, personal communication, July 6, 2015).

Significance/Importance of the Study

No current studies exist that examine the role of the 4-H specialist through the perception of the 4-H agent. As previously mentioned, a similar study was conducted at the University of Tennessee Knoxville in 1994 that focused on the perception of the 4-H specialist role as perceived by state-level administrators, specialists from other Extension departments, and county 4-H agents (Carver, 1994). This proposed study is not a replication of Carver's study but proposes to expand and build upon that research. Additionally, since the 1994 study was conducted, there has been sizeable turnover in county-level 4-H agent positions and 100%

turnover in the state 4-H staff (R.W. Clark, personal communication, January 21, 2016). An understanding of the perceptions of county 4-H agents related to the role of the state 4-H specialist may help guide the development of job responsibilities and priorities for the 4-H program.

As the University of Tennessee 4-H youth development department undergoes change, this study will provide insight related to the viewpoint of the 4-H agent. As previously mentioned, the 4-H youth development department was combined with the Agricultural Leadership, Education, and Communications department in 2015. This merger has provided the opportunity for 4-H specialists to have joint appointments within the university, meaning that now some of the 4-H specialists teach college courses and advise college students. This change has provided additional staff to the department but with varying levels of 4-H responsibility, thus leading to some ambiguity as to roles and responsibilities.

Definition of Terms

4-H agent – a county-level staff member who organizes 4-H club activities for one county. In some states, agents are referred to as field staff (Hastings, 2018).

4-H specialist – a state-level staff member who coordinates and oversees 4-H club activities statewide (Carver, 1994).

Agricultural Leadership, Education and Communications (ALEC) – an academic department at the University of Tennessee Knoxville (Clark, 2016).

Baby Boomer generation – the generation of people born between 1946 and 1964 (Dimock, 2019).

Cooperative Extension – the educational outreach component of the U.S. Department of Agriculture, the land-grant university, and county government (Lauxman, 2015).

County government – the administrative body for a small geographic area in Tennessee. This local government has control only over its definitive geographic region. County governments can elect officials and do many other things that a national government can do (WebFinance, 2016).

Delphi – a method of group decision-making and forecasting that involves successively collating the judgments of experts (Okoli & Pawlowski, 2004).

Generation X – the generation of people born between 1965 and 1980 (Dimock, 2019)

Millennials – the generation of people born between 1981 and 1996, also referred to as Generation Y (Dimock, 2019)

Rural – a county that has a population between 1,000 and 2,500 people (Bureau, 2010).

Silent Generation – the generation of people born between 1928 and 1945, also referred to as the Mature generation (Dimock, 2019)

State 4-H staff – a team of individuals who give state-level programmatic direction to the 4-H program (Hastings, 2018).

Suburban - a smaller community adjacent to or within commuting distance of a city (Webster, 2018).

Tennessee State University (TSU) Cooperative Extension Program – a Cooperative Extension outreach program at Tennessee State University ("TSU Extension," 2016).

Urban cluster – a county that has between 2,501 and 50,000 people (Bureau, 2010).

UT Extension – the Cooperative Extension outreach program at the University of Tennessee (Hastings, 2018).

Urban – a county that has a central city of more than 50,000 people (Bureau, 2010).

Methodological Assumptions

Several assumptions will be made during this study:

- County 4-H agents will be cooperative in assisting with the study.
- The researcher-designed instrument will quantify what it is intended to measure.
- All statistics that will be used in data analysis are appropriate for analysis.
- All 4-H agents will accurately report their responses on the survey.

Delimitations of the Study

This study will be delimited to a volunteer sample of Extension agents who are currently employed with the University of Tennessee or Tennessee State University. Extension 4-H agents, ranging in age from 21 to 70, will be included in this study. Some participants may have a split appointment with 4-H and either agriculture or family and consumer sciences; the percentage of their 4-H appointment may range from 10% to 100%.

Limitations of the Study

There will be potential limitations related to this study. One limitation is a lack of generalizability because the respondents in this study represent only people working in 4-H roles in Tennessee. Additionally, 4-H agents may prefer not to respond to sensitive questions that may be viewed as potentially detrimental to their careers. However, by providing confidentiality, there should be no real concern for a lack of honesty in responses. Confidentiality will be

ensured through the use of Qualtrics, which has the functionality to collect survey responses and information confidentially ("QuestionPro," 2018).

Furthermore, relational history could be a concern. For example, the 4-H specialists, in many cases, work closely with the county 4-H agents. The two sets of people might have previously served on committees together, worked on collaborative projects, or assisted with a joint event. There is potential that a 4-H agent could have had a negative experience while working with a 4-H specialist, which might bias his or her responses.

There is also potential for researcher bias in this study; therefore, every effort will be made to control for bias. Additionally, response bias could be a challenge, given that the researcher is in a leadership role within 4-H and the University of Tennessee Extension. County 4-H agents could potentially respond based on how they believe the researcher might prefer a particular response. To control for potential bias, respondents will be informed that their responses are confidential, and every effort will be made to maintain the agents' confidentiality throughout the survey process.

CHAPTER II

REVIEW OF THE LITERATURE

In an effort to determine what research has been previously conducted relative to the role of the 4-H specialist in organizing a statewide 4-H program, an extensive literature review was completed. The search yielded information related to the history of both Cooperative Extension and 4-H youth development programs, 4-H culture, as well as the role of both the 4-H specialist and county 4-H agent. Additionally, information related to generational differences, specifically as they relate to the workforce, surfaced during the review of the literature.

Theoretical Framework

As previously discussed, stakeholder theory is one of the theories which will help guide this study. Freeman (2004) points out that a value system plays a key role in how business is conducted within an organization. Stakeholder theory, which considers the role of management and that of the stakeholders, considers factors that often address organizational ethics such as what an organization owes to stakeholders and if a moral obligation exists between the organization and its stakeholders (Phillips, 2003). One component of stakeholder theory suggests that it directs how managers function in the workplace (Freeman, 2004).

In this theory, stakeholders' views and thoughts are valued by others and are an integral part of moving the organization forward (Freeman, 2004). According to Frooman (1999), consideration should be given to the relationship that exists between the organization and the

stakeholder, as well as the power that arises from it. Individuals within an organization who have been given an opportunity to provide input into the organization's functions may feel more empowered as a result. Employee input related to organizational structure or functions of UT Extension, as well as the perception by the employees that their contributions have been taken into consideration when administration is making higher-level decisions, could lead those employees to feel more valued.

Generational Theory

In addition to stakeholder theory, generational theory will also guide this study. Generational theory impacts workplace relationships in various employment situations. *The Problem of Generations*, written by Mannheim (1952), as cited in Knight (2009), was the first text where generational theory was discussed. Mannheim believed generational values shaped and defined generations, thus impacting their personal and professional relationships. For instance, Mannheim defined a generation as more than a cohort clustered by a bounded year of birth, and instead, he proposed that a generation is actually a group of contemporaries who share a history and a set of experiences that have marked their formative life (Knight, 2009). Mannheim (1952) went on to suggest that in order to formulate productive relationships, generations need to actively recognize their influential experiences. Generational theory places importance on valuing the experiences that shape generations, but these differentiated generations often shape each other.

4-H History

The 4-H program is the primary youth development outreach program of the land-grant system. This program serves more than seven million youth in grades three through 12 in 50 different countries around the world ("4-H Global Network," 2015). Since its beginning, 4-H has emphasized the importance of young people being engaged by connecting to their communities and developing life skills in order to become more productive citizens. The 4-H program provides learning opportunities for young people through training and educational experiences in healthy living, science, citizenship, leadership, and agriculture (Lauxman, 2015).

In terms of helping rural youth, the 4-H youth development program has a deep history. In 1902, A. B. Graham, a school superintendent in rural Ohio, saw a need for extracurricular educational opportunities for rural youth that were focused on agriculture and home economics (Dalzell, 1999). Corn clubs began for boys and tomato canning clubs for girls (Dalzell, 1999). Graham was provided a space in the basement of the county courthouse to hold his first meeting for the local boys and girls on January 2, 1902 (Reck, 1951). This meeting began 4-H club work in the United States. What originated as a rural agricultural program for youth in Clark County, Ohio, quickly spread across Ohio and soon thereafter, around the nation (McCormick, 1934). Over time, 4-H club work began to expand. In 1906, Extension outreach programs were offered for African Americans in southern states, beginning in Alabama and Virginia. Those early programs were focused primarily on agriculture and home economics. The earliest known records for 4-H club work were written in 1916, when it was estimated that there were over 2,500 African American 4-H club members in the south (Reck, 1951).

Extension 4-H programs began in Tennessee in 1910 (UTK, 2010). That year, six west Tennessee counties began outreach work with the hiring of part-time agricultural agents. The

agents worked with farmers and youth three days a week for nine months each year, while the rest of their time was spent on their own farms. Soon, 12 middle and west Tennessee counties had formed corn clubs for boys and tomato canning clubs for girls. By the end of 1910, almost 1,700 youth were enrolled in the 4-H club. These clubs were designed as demonstration clubs, allowing young people to test crop varieties and share their results with other 4-H club members and their parents. Furthermore, during World War I, food production increased in importance. Sound agricultural practices around food production were already being taught to rural youth through 4-H club programs. This had implications for 4-H club work in Tennessee, as new audiences were now being reached with food and agricultural educational programming (Emery, 2010). Not only were educational programs expanding, but so were the clientele. In 1916, five African American agents were hired to work with African American children and families in Tennessee. The addition of new staff, particularly for severely underserved audiences, allowed for growth of the 4-H program (Powell, 1987).

County 4-H agents use a variety of delivery methods in implementing the 4-H program to reach rural, suburban, and urban youth. These include classroom 4-H club meetings, after-school programs, project groups focused on one particular 4-H project, and community-based clubs. These delivery methods allow young people to participate in activities that are grounded in research, which will further their life skill development ("What is 4-H?," 2018).

Involvement in the 4-H program has varied since its inception. In 1914, national membership was recorded at 116,252, primarily all of which came from farms and rural America (B. E. Van Horn, Flanagan, C. and Thomson, J., 1999). The membership of 4-H peaked in 1974 at 7.5 million, with approximately 32.2% of members who lived on a farm, 40.1% from rural areas, and 36.7% of the club's membership from towns and cities with populations over 10,000.

Around 20 years later, in 1994, membership had declined to 5.6 million members. Of this population, 13% of the population came from farms, 37% from rural areas, and 50% from towns and cities with populations over 10,000 (B. E. Van Horn, Flanagan, C. and Thomson, J., 1999). Of the 5.6 million youth involved in 4-H in 2014, 10.6% lived on farms, 34% of youth lived in rural non-farm areas, and 25% resided in towns and cities over 10,000. Additionally, 9.8% of 4-H youth lived in suburbs of cities over 50,000 and 19.6% lived in central cities over 50,000 ("4-H reports," 2014). According to B. E. Van Horn, Flanagan, C. and Thomson, J. (1999), a decline in the number of family-owned farms as well as a rise in urbanization contributed to these numbers.

Extension History

Cooperative Extension serves as the outreach component of the U.S. Department of Agriculture, the land-grant institution, and the county government (USDA, 2016). The Cooperative Extension Program provides research-based information in four subject areas: agriculture, community and resource development, family and consumer sciences, historically referred to as home economics, and 4-H youth development. This organization has a nationwide reach, with 74 land-grant universities and 3,150 county offices (Hastings, 2018).

The history of the land-grant university, the institution of higher learning which houses the cooperative Extension program in each state, officially began in 1862. The Morrill Land-Grant Act, proposed by Vermont representative Justin Smith Morrill, provided resources to each state to allow members of the working class to obtain a liberal, practical education. The original focus of these institutions was to teach agriculture, military tactics, the mechanical arts, and classical studies ("Land-Grant University," 2016).

Just as the Morrill Act of 1862 provided an affordable education to the working class, the second Morrill Act provided an education for minorities, specifically African Americans. This act prohibited racial discrimination in admissions to 1862 universities receiving funding. Each state had two options: admit minorities to their 1862 institution or establish a separate but equal institution (Rasmussen, 1989).

As previously mentioned, 4-H programs emerged as early as the beginning of the 20th century. As these programs progressed, the federal government took notice of the programs offered to farmers and farm families. This interest was motivated by a dilemma faced in Texas. The boll weevil, which had migrated north from Mexico, brought with it serious concerns for farmers as the cotton industry was in serious danger of being demolished (Wessel, 1982).

The United States Department of Agriculture Bureau of Entomology sent one of their staff members, Seamen Knapp, to Texas to introduce a tillage practice that they believed would help reduce destruction (Wessel, 1982). The concept of teaching the farmers was more challenging than had been predicted. In 1903, however, Knapp convinced a local farmer in Terrell, Texas, to utilize the new tillage method with assurance that he would be compensated for any crop loss. The farmer, Walter Porter, recognized a considerable increase in income from the acres he planted using the new methods. This concept of application of theory and practices began to take form and led to additional federal support. That same year, the United States Department of Agriculture, Office of Farmer's Cooperative Demonstration Work was developed. While Knapp's office was specifically focused on working on those areas affected by the cotton boll weevil, his ideas began to spread (Wessel, 1982).

A few years later, the Smith-Lever Act of 1914 formally established the Cooperative Extension Program in the United States, thus creating Extension outreach programs (Lauxman,

2015). Senator Hoke Smith of Georgia and Representative Asbury Francis Lever of South Carolina introduced the act to further develop the vocational, agricultural, and home economics programs in rural America. Federal, state, and local funding supported the creation of this formal outreach component for each land-grant university. The intent of creating this outreach was to take the resources and research from the university land-grant system to the people, including farmers and homeowners, as well as rural schoolchildren (Gould et al., 2014). President Woodrow Wilson signed the Smith-Lever Act on May 8, 1914. In signing it, he referred to the act as "one of the most significant and far-reaching measures for the education of adults ever adopted by the government" (Rasmussen, 1989). This act officially began the work which would soon occur across the nation and around the world.

Cooperative Extension work in Tennessee predates the passage of the 1914 Smith-Lever Act. In 1909, W.W. Campbell, a representative of the United States Department of Agriculture, began working in Jackson, Tennessee, to stimulate interest in rural and agricultural education through farm demonstrations (Sims, 1952). Campbell dedicated much of his effort to growing the boy's 4-H corn club (Sims, 1952).

As early as 1910, county-based agents were helping Tennesseans, specifically in west Tennessee, with cotton production, home canning, and 4-H club work. The first county agent was appointed in Tennessee on December 1, 1910. By the end of February 1911, six part-time agents were hired in west Tennessee. These included: G.B. Rhodes, Tipton County; R.L. Moore, Dyer County; J.B. Skinner, Obion County; L.M. McCollum, Chester County; O.W. Erwin, McNairy County; and A.R. Bridger, Crockett County (Sims, 1952). These men worked their own farms and helped farmers and landowners with their own farming practices using research from the state land-grant university (Sims, 1952).

As interest grew, so did the precursor to the 4-H club, the boy's corn club. Beginning in west Tennessee, 12 counties had corn clubs with a combined membership of 1,685 in the first few years of club work (Sims, 1952). The first few years solely focused on corn production with other crops being added in the following years. In the same year, 1910, Virginia P. Moore was hired as the first home economics agent and was charged with working with ladies and girls in developing canning clubs, specifically focused on canning tomatoes (Sims, 1952).

On July 1, 1914, a staff of 20 county agricultural agents, 22 home demonstration agents, currently known as family and consumer sciences agents, and eight other staff members were assembled under the Smith-Lever Act as part of the University of Tennessee Agricultural Extension Service. These individuals had already been providing rural outreach and agricultural education for a few years by this point in time. The program began in west Tennessee but had begun to spread across the state (M. Taylor, 2010).

4-H Culture

According toWillman (1963), young people require a well-rounded experience and self-assurance while they are being raised on the farm, and initial training that will help them further address the needs of the future. One way that 4-H addresses well-roundedness is through 4-H project work. While selecting a 4-H project is elective, it does provide youth with ownership of their interest and work. A project should be applied and provide gratification and, in some cases, income for the young person (Willman, 1963).

Presently, Tennessee 4-H continues to implement many of the same types of projects that were offered when the program began in 1910 (S.R. Sutton, personal communication, July 6, 2015). Tennessee 4-H members are still very active in livestock projects, ranging from beef

cattle to swine. Additionally, 4-H members continue to participate in activities related to clothing and textiles as well as food preparation. In recent years, projects related to computers and technology have provided nonrural youth with 4-H club experiences and opportunities. Today, more than 186,000 Tennessee youth participate in 4-H activities on an annual basis (S.R. Sutton, personal communication, July 6, 2015).

Club work has been the foundation of the 4-H program, meaning that groups of individuals with similar interests participate in 4-H as part of a club. In Tennessee and a few other southern states, a large portion of the 4-H club work is held during the school day. The 4-H agents deliver their monthly educational program and conduct contests in school classrooms in every county in Tennessee (S.R. Sutton, personal communication, September 16, 2016). This provides access to a captive audience and offers a venue for an extracurricular opportunity as part of the school day experience (B. E. Van Horn, Flanagan, & Thomson, 1998).

While the 4-H programs offered in Tennessee and around the nation are research-based and educational, this effort requires a great deal of human capital. In many states 4-H programs, trained volunteers conduct local educational activities and events while the 4-H agent serves as a middle manager. In Tennessee, the 4-H agent, a paid university employee, provides leadership to the total county 4-H program and delivers many of the educational classes (R.W. Clark, personal communication, October 7, 2015).

The Role of the 4-H Agent

According to Toman (2018), Tennessee Extension agents are educators who work with people from all social, economic, racial, and ethnic backgrounds in rural, suburban, and urban areas. Extension agents teach anywhere a person can learn. The Extension agent's classroom

may be a farm, the county Extension office, a school classroom, an amphitheater, a garden plot, or the family home. Additionally, Extension agents use outlets such as radio, television, websites, newspapers, email, and direct mail as methods to reach Tennesseans with the latest research information to improve their lives (Hastings, 2018).

A recent study, conducted at Mississippi State University, examined the relevant roles of Extension personnel as perceived by county-level employees (Barnes, 2014). The study identified six themes related to the perceived role of the county Extension agent:

- *Competent Servants* refer to employees who are well trained and knowledgeable of subject matter and the community. These employees return calls in a timely manner, provide resources and answers to questions based on research and go way beyond the call of duty.
- *Doers of Change* describes the role of local Extension staff in embracing ongoing changes, including the use of technology, and to be willing to accept change.
- *Equal Opportunity Providers* defines the agent's role of making programs and resources available to all audiences without discrimination. It requires agents to conduct activities in rural communities to reach underserved populations and to be more inclusive of nontraditional audiences.
- *Providers of Needs* describe the county employee's role of meeting clients' needs. Agents are diligent in planning appropriate programs around clients' unique needs.
- *Community Mouthpieces* refer to employees who market programs, are visible in the community, and who publicly communicate program successes.
- *Community Engagers* interact with the local community. They form community partnerships and seek stakeholder involvement in program planning and implementation. (Barnes, 2014, pp. 3-4)

These perceived roles provide insight on the responsibilities held by county 4-H agents. State-level focus on these responsibilities may help specialists be more productive. The aforementioned themes illustrate the complexity of the role of the state-level 4-H specialist and the many ways these professionals are viewed.

L. M. Baker and Hadley (2014) noted that agents have concerns related to professional development, including time management. Another concern is a limited connection with on-campus resources such as labs and specialists. Additionally, agents expressed a need for training

and resources for programming, which entailed a listing of available resources and curricula that could be utilized within the county Extension program. Cooper (2001)identified competencies needed by county Extension agents were categorized into seven themes relative to Extension work. They include:

- Program planning, implementation, and evaluation
- Public relations
- Personal and professional development
- Faculty/staff relations
- Personal skills
- Management responsibility; and
- Work habits

The most prevalent competencies of county Extension agents that emerged from this research included dependability, fairness, honesty, trustworthiness, credibility, respect, and responds promptly (Cooper, 2001).

Role of the 4-H Specialist

Within the Extension program, county 4-H agents depend on state-level specialists for research-based information, curricula, and publications to aid in delivering educational 4-H programs within a given county. These specialists' expertise in youth development helps them serve as a resource for county-based Extension staff. Specialists have the capacity to locate and interpret multifarious information and relate that information for local or county 4-H use (Radhakrishna, 2001).

Woeste (2005) provided a detailed and organized depiction of the roles and responsibilities of the Extension specialist. While noting the uniqueness of each state 4-H program, the authors listed three primary responsibilities: leadership, scholarship, and synthesis of research. They identified the following specific examples:

- Staying current with the latest research and technologies
- Providing leadership for development, implementation, and evaluation of new initiatives
- Understanding needs and concerns of clientele
- Integrating research information and expertise into educational programming materials
- Creating awareness among county agents regarding new program initiatives
- Providing technical subject matter assistance to county staff in the conduct of Extension programs
- Identifying funding sources to further the effectiveness of Extension
- Providing feedback to departmental faculty and program leaders on programming needs
- Encouraging the involvement and participation of other university faculty, as well as community, member, and industry experts and leaders, in the development and implementation of educational programs
- Participating in disciplinary and professional activities

The lack of consistency in job responsibilities across a system is related to a variety of factors. According to Radhakrishna (2001), several issues have deeply impacted the roles and responsibilities of Extension specialists. These issues include budget reductions, dual

appointments in other areas of the university, personnel turnover, increased workloads, and rapidly changing expectations of a more diverse clientele.

The 4-H specialist may work with county agents who are implementing 4-H programs on a local or county level. These same specialists may also collaborate with state agencies or community groups. According to L. M. Baker and Hadley (2014), 4-H youth development ranked last out of the three program areas, including agriculture, family and consumer sciences, and 4-H youth development. In terms of interaction between specialists and agents, ambiguity is present in Extension specialists' roles and responsibilities in conducting needs assessments, setting programs, and establishing initiatives (M. Baker & Villalobos, 1997). Various explanations have been given for this vagueness. M. Baker and Villalobos (1997) argued that budget reductions have negatively impacted how specialists perform their duties, leading to ambiguous responsibilities. State-level 4-H specialists often feel locked into current program efforts and do not feel empowered to update or make changes in 4-H program direction or vision, potentially due to administrative direction or focus (Burcalow, 1981).

The opportunities for Extension specialists have increased as technology has advanced. Extension specialists, within the department of Family and Consumer Sciences at the University of Tennessee, have explored innovative technologies such as augmented reality (AR) to serve the public. Providing information in a real-time format that requires little of the user is essential to continuing the mission of Extension. Using technologies like AR to extend knowledge directly to clientele embodies Extension's commitment to being innovative (Wallace, 2018).

Generational Differences

Generational differences should also be considered when studying perceptions of individuals related to job roles and responsibilities. According to Kupperschmidt (2000), a generational cohort can be defined as an "identifiable group that shares birth years, age, location and significant life events at critical developmental stages" (Kupperschmidt, 2000, p. 66). The three generations that are most predominant in today's workforce are Baby Boomers, Generation X, and Generation Y. Baby Boomers are generally classified as being born between 1946 and 1964 (Dimock, 2019). Generation X includes individuals born between 1965 and 1980, and Generation Y, or Millennials, are comprised of people born between 1981 and 1996 (Dimock, 2019). Compared to other generations, the Baby Boomers are the most populous, peaking at 78.8 million in 1999 (Fry, 2015). Not previously mentioned is one additional generation, the Silent Generation. Commonly classified as being born from 1928-1945, this group is referred to as the Greatest Generation and the Matures (Dimock, 2019). This generation endured two monumental events during their era the Great Depression as well as World War II (P. Taylor, 2014).

Some generational differences influence why individuals work, how they work, where they work, and what they expect from work (Gordon & Steele, 2005). Many factors exist that cause generations to prefer certain characteristics or qualities in the workplace. Each generation's work approach, ethics, and expectations were shaped by the historical and social events that took place during their formative years (Gordon & Steele, 2005). For example, Baby Boomers experienced political and social chaos, including the civil rights riots, the Kennedy and King assassinations, Watergate, and the sexual revolution (P. Taylor, 2014). Additionally, Baby Boomers were raised to respect authority figures and believe in loyalty toward their employers

(P. Taylor, 2014). This generation tends to believe that toil and sacrifice are the price one has to pay to reach success (Tolbize, 2008).

Members of Generation X, also known as Generation Xers, grew up in an era of failing marriages and pop culture. This generation saw fewer nuclear families than the generation before them and experienced divorce and single-parent homes (Howe, 2007). As it relates to the workplace, Generation Xers have career aspirations, unlike previous generations, such as being their own boss (Howe, 2007).

People who are identified as Generation Y, those born after 1980, have been classified as the most confident generation (Tolbize, 2008). In the workplace, this generation often seeks opportunities to develop new skills and embrace a new challenge. Also referred to as Millennials, or Echo Boomers, they desire fair and straightforward supervisors as well as immediate gratification. This generation, unlike previous generations, needs flexibility in their work and believes in work-life balance (Spiro, 2006).

Research by Cennamo and Gardner (2008) supported the view that work value differences may exist between generations, considering that each generation was introduced to the workforce at differing stages in time. Generational differences in work values have been associated with changes in the connotation of work, increasing numbers of dual-career and single-parent families, and expectations for work-life balance. Research suggests that generations have a varied approach to work itself. For example, some theorists refer to Baby Boomers as individuals who live to work and Generation Xers as people who work to live (Sherry, Monica, Shawn, & Lisa, 2009). Often, Baby Boomers are considered to be workaholics who flourish on accumulative work challenges while Generation Xers place a greater value on balance, to the point of being viewed as slackers by their predecessors (Sherry et al., 2009).

The research varies in terms of specific birth years connected to each generation, with a variance of a few years based on the source being consulted. Additionally, individuals who are born very close to the separation line between generations are often referred to as cuspers (Johnson, 2010). Individuals born within the crossovers of two different generations may lean dominantly toward the values and characteristics of one generation over the other (Johnson, 2010).

The University of Tennessee and Tennessee State University Extension have a varied workforce in terms of service years. Some of the employees are veterans of the organization, serving in their county role for 30 years or more. Others are midcareer, having been employed for 10 to 20 years. A large number of employees are in the first five years of their career. However, some Extension employees transitioned from another role, such as a classroom teacher, into their current Extension role, bringing in years of classroom experience (I.W. Slade, personal communication, October 1, 2015).

Generational Differences in the Workplace

The delineation of these generations pertains to the application of generational theory for analysis of Extension workers because Extension has older and more traditional roots. Many county Extension agents and specialists from the Boomer or Generation X generations interact daily with other Extension agents and specialists who may be from the Millennial or Generation Y. In terms of age, Baby Boomers would have a current age range from 59 and 76, the Generation X generation range is between 58 and 43, and the Generation Y generation range is between 27 and 42. This combination of different generations within the Extension office and other work settings make it useful to examine because of their influences on one another, just as

Strauss (1991) proposed these generations mold and shape history (Drago, 2006). To understand the value of these generational differences in the workplace, like as 4-H and Extension agents, breaking down the history, influences, values, and ethics of each generation is necessary.

Members of the Baby Boomer Generation, born between 1946 and 1964, were born amidst a torrential mixture of war, peace, economic change, individual rights evolvement, and international relations. Being born at the height of World War II, through the Korean War and Cold War Era, to the precipice of the Vietnam War, allowed this generation to see the first televised and reported international war and peace interactions. This generation also experienced an economic boom from industry rise to middle class America establishing traditional values and resets of gender roles in employment. For instance, women thrived in the industrial world through the end of World War II, only to be relegated back to home status as mothers and homemakers (Drago, 2006). Besides the onset of gender roles, the Baby Boomers witnessed major historical events like the assassination of great leaders like Present John F. Kennedy and Reverend Martin Luther King, Jr., the emergence of international activities like the Cuban Missile Crisis, and the home-front battles of the Civil Rights and Women Right's movements. These events were often tumultuous, creating direct and indirect reactions which sparked individualization, independence, and determination from Baby Boomers (Drago, 2006).

In the workforce, Baby Boomers possess key characteristics. These were honed by their historical, social, and economic influences. According to authors Zemke, Raines, and Filipczak (2013), Baby Boomers demonstrate the following work values:

- Believe in growth and expansion
- Value their own contribution and others to the workplace
- Display optimism

- Demonstrate teamwork
- Adapt to change
- Have inner perspective
- Show natural leadership

The next generation, Generation X, needs the Boomer Generation and their leadership to ground them in the employment environment. This group of individuals was born between 1965 and 1980. The historical events shaping their adulthood involved violent American interaction in the Middle East (Drago, 2006). Positive historical implications on Generation Y include the enhancement of the computer world and the dissolvement of communism. For instance, they became extremely independent, having to make decisions without their parents around [parents in the workforce], and they also became extremely comfortable using the computer (Drago, 2006). Based on the findings of Zemke, Raines, and Filipczak (2013), Generation Xers have the following characteristics:

- Desire to have a family
- Need a balance between personal and professional lives
- Do not follow a normal work schedule
- Appreciate a more informal setting
- Enjoy adventure outside of the workplace

Further interpretation by Drago (2006) implied it is important for Generation Xers to know they are encouraged to have a balanced life outside the workplace.

Drago (2006) went on to address how Generation Xers prefer not to be micro-managed and enjoy balancing multiple projects at once, which is what they prefer in their workplace.

Unlike Generation Xers, Millennials, born between 1981 and 1996, come from a higher standard of living, with smaller families and more parental influence on them. This generation is the first to grow up with true images of female empowerment and in a culture that has made gender neutrality the norm (Drago, 2006). Key events and trends that have shaped this generation include an increase in exposure to violence, technology, busyness, and stress. They too have been exposed to war and demise of influential people (Princess Diana's death, the O.J. Simpson trial, and the President Clinton/Monica Lewinsky affair). Their exposure to an extremely diverse ethnicity, evolving concept of the traditional family, and personal access to technology contrasts them to the previous two generations. In fact, their worries cover academic failure, economic failure, and fear of terminal illness (Drago, 2006). Characteristics identified for their generation include:

- Motivated and optimistic
- Interested in entertainment
- Less financially frugal
- Materialistic
- At ease with technology
- Fear violence and peer pressure
- More inactive than physical
- Team players and value community
- Confident and flexible
- Tolerant, innovative, responsive, loyal, and committed (Drago, 2006)

Geographical Differences in Tennessee

Tennessee is divided into three geographic regions, mostly referred to as east, middle, and west. Winfield Dunn, former governor of Tennessee, noted during his campaign that Tennessee was three different states and made a commitment to unify the three grand divisions if elected (Fontenay, 2016). According to the Tennessee Historical Society, the three grand divisions of Tennessee are legal as well as cultural and geographic in nature. These divisions within the state date back to the earliest period of European settlement (THS, 2020).

East Tennessee includes the Southern Appalachian Mountains, the eastern Tennessee River Valley, and a percentage of the Cumberland Plateau. In terms of agriculture, the soil is less than desirable for large scale farming operations and, therefore, has smaller farms. Middle Tennessee is the largest of the three grand divisions in terms of area, encompassing 41% of the state's landmass. Surrounded by the Highland Rim, it contains the remainder of the Cumberland Plateau and the Nashville Basin. Its lush valleys and rolling hills make it better suited for larger scale farming operations than the eastern part of the state. West Tennessee, which is bordered by the Mississippi River in the west and the Tennessee River in the east, was the last region of the state to be settled. Rich soil, attributed to the land being part of the Mississippi River Basin, is home to large-scale agricultural operations, including cotton production (THS, 2020).

Related to Extension, the three grand divisions have played a large role in the organizational structure. Originally divided into five districts, UT Extension had regions which were somewhat organized by the grand divisions. District I was based in Jackson and included all west Tennessee counties. District II was based in Nashville and encompassed a large percentage of middle Tennessee counties. Chattanooga was the home for District III and included the majority of the counties in east Tennessee south of Interstate 40. District IV

includes counties in the area of the state known as the upper Cumberland and was based in Cookeville. Knoxville was the base for District V and included the majority of the east Tennessee counties (Powell, 1987). Over time, staffing changes have resulted in the consolidation of the regions from five to three. Now, the regions are eastern, central, and western, encompassing more closely to the grand divisions of Tennessee (Senseman, 2020).

This review of the literature indicates that research has been conducted in the area of generational differences, but no studies were found that examined the impact of the generational difference among 4-H agents related to job performance. Based on the review of the literature, extensive research has been conducted relative to 4-H, although no recent research studies that were reviewed indicated any relationship between perceptions of county 4-H staff and the roles of the 4-H specialist. The proposed study addresses these gaps, and its methodology is described in the next section.

Gender Differences

According to the World Health Organization, gender refers to the traits of men and women in terms of their social construct. This explanation includes behaviors, roles, and norms associated with being a male or female, as well as the relationships held with others. As it relates to being a social construct, gender fluctuates from society to society and could change over time (Petric, 2022).

In relation to Extension work, gender roles were traditionally very specific. For example, the earliest employees working with youth and adults in agricultural principles were always men and the same held true for staff who led youth and adult home economics activities. Those roles

were always held by females (M. Taylor, 2010). Additionally, programs that were offered in agriculture were provided for men and home economics lessons were taught for females.

As time progressed, so did Extension. In the 1970s and 1980s, more young women became interested in agricultural work. This included females participating in livestock judging competitions and engaging in crop production projects in 4-H. Equitably, young men became interested in clothing and textiles and nutrition programs, participating in fashion revue and 4-H cooking demonstrations. This trend has continued until present day (S. Sutton, personal communication, December 1, 2022).

CHAPTER III

METHODOLOGY

The goal of this study was to investigate the role of the state-level program experts, called 4-H specialists, as perceived by field-based staff, called 4-H agents, in Tennessee. This study helped clarify agents' perceptions of the responsibilities of the Extension 4-H specialists and identify responsibilities that 4-H specialists should perform based on needs of the 4-H agents. Currently, roles and responsibilities of the Extension 4-H specialists are set by the State 4-H Program Leader, who is the director of the state 4-H program. The director discusses specific roles and responsibilities in consultation with each specialist in making determinations.

In addition, the study determined if a relationship exists between agents' generational or demographic differences and their perceptions of the 4-H specialist role. Specifically, the study addressed five research questions:

- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different ages of 4-H agents? (Analysis of Variance {ANOVA})
- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different genders of 4-H agents? (t-test)
- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on years of experience (in increments of 10) of 4-H agents? (ANOVA)

- Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different geographical locations of 4-H agents? (ANOVA)
- How do 4-H agents perceive that Extension 4-H specialists are performing their duties? (Qualitative)

Successful completion of this research could result in:

- Better understanding of the needs of 4-H agents.
- Inform programmatic direction to help prepare 4-H agents to better serve the youth of Tennessee.
- Provide insight into requisite essentials and tools needed by county 4-H agents to effectively implement a county-based 4-H program.

The Nature of the Population

The University of Tennessee Extension and Tennessee State University Cooperative Extension combined employ 225 Extension agents with varying levels of 4-H responsibility, ranging from 10% to 100% of their duty. These staff members may have 50% of their time assigned to agricultural programs and 50% to 4-H youth development. Any employee who has at least 10% of his or her time assigned to 4-H work was eligible for the study. The age of these agents ranges from about 21 to 70 years. This population of 4-H agents represents various generations and all 95 counties within Tennessee.

Variables

The dependent variable in this study was the 4-H agents' perception of the state-level 4-H specialist's role. The independent variables in the study included age, gender, geographic

location, and years of experience. One attribute variable was years in the position. Some of the county 4-H agents are second-career employees and may have only five years of experience with 4-H; however, they might be over 50 years old and have 20 years of experience in a related field. Another attribute was the number of years in the profession with Tennessee Extension, as some employees may be older in terms of age, but Extension is their second career. An additional attribute is the percentage of 4-H appointment. Many of the 4-H agents have a 100% appointment in 4-H, meaning they dedicate all their time to working with 4-H and youth audiences. Other agents may carry 75% responsibility in adult agriculture and only a 25% appointment working with 4-H and youth audiences (R.W. Clark, personal communication, January 21, 2016).

Instrumentation

This study utilized a survey research design. Survey research is defined as “the collection of information from a sample of individuals through their responses to questions" (Check & Schutt, 2011, p. 160). For this study, the researcher utilized an availability sample of approximately 225 county 4-H agents. The focus of the study was to compare the relationship between the generation, gender, geographic location, and years of experience of the respondents as well as their perception of the role of the state 4-H specialist through a questionnaire. A questionnaire was administered to a group of respondents using Qualtrics, an online data collection site. The questionnaire used was developed by a team of faculty members within the 4-H as well as the ALEC department at the University of Tennessee and was based on recommendations from the previously mentioned research study conducted at the University of Tennessee in 1994, which addressed the roles of the state-level-Extension 4-H specialist (Carver,

1994). Instrument validity was assessed through a group of panel experts. These experts in the area are extension 4-H specialists at Louisiana State University. This group of professionals was chosen as Louisiana 4-H is very similar to Tennessee 4-H, and these individuals have a clearer understanding of the role of extension specialists. These experts reviewed the instrument for validity and provided feedback via a Qualtrics survey link. The experts were asked if the layout of the instrument was sound, to which over 95% responded that they agree. They were also asked if the instrument provided a reasonable range of variation. Of the respondents, 88% agreed. When asked if the instruments could provide insight into the basic purpose for which it was designed, 92% responded yes. The group had no real constructive feedback for the actual instrument design; therefore, the instrument was unchanged.

Research Design

This study was mixed methods in nature, which used questionnaire research to collect data that included three open ended questions. All data, with the exception of geographic information, was collected on a 5-point Likert-type scale. By use of frequencies and distributions, the data was used to describe the sample, which were Extension agents with at least a 10% appointment in 4-H youth development. The *t*-test and analysis of variance (ANOVA) were used to measure differences in perception as it relates to the independent variables. ANOVA was utilized to measure variables with more than two levels of grouping variables. The *t*-test was applied when the grouping variable has only two responses, such as gender or other dichotomous levels. Confidence intervals and tests for statistical significance were set at the 0.05 level.

As previously mentioned, the intention of this study was to determine if a relationship exists between agents' generational or demographic differences and their perceptions of the 4-H specialist role. It was projected that the findings from this study would provide insight to contribute to the UT Extension 4-H Youth Development department. Additionally, this study added to a growing body of literature.

CHAPTER IV

ANALYSIS OF DATA

Introduction

The purpose of this study was to examine the perception of 4-H agents in terms of the role of the state level Extension 4-H specialist. Data analyses for this study included an examination of demographic factors and 13 questions related to perception (quantitative) as well as three open ended questions (qualitative). Five research questions were examined to determine the perceived role of the 4-H specialists from the perspective of the current 4-H agents and identify what differences exist between role perceptions of the specialist and generational or demographic differences among the agents.

Population and Sample

The survey used for this study was sent to 225 county level 4-H agents employed by either University of Tennessee or Tennessee State University Extension. An email was sent to all staff with county level 4-H appointments by the dean of UT Extension utilizing the UT Extension 4-H agent listserv, with two follow up e-mail reminders. The email invited county 4-H agents to participate in the study. Of the total presumed 225 valid email addresses, 79 (35.1%) participants responded although some did not report on every questio

Of the 79 participants, responses to the demographic questionnaire were summarized using frequency distributions and/or descriptive statistics. As shown in figure 1.2, the most

common age range (N=62) for this study was 50-69 years of age (21.5%). The next two largest groups were 30-39 years of age and 40-49 years of age (both with 20.3%). The gender of the sample group (N = 63) included 15 (23.8%) males; 43 (68.3%) females; and five (7.9%) who preferred not to answer, as demonstrated in figure 1.3. The remaining individuals did not respond.

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-29	13	16.5	21.0	21.0
	30-39	16	20.3	25.8	46.8
	40-49	16	20.3	25.8	72.6
	50-69	17	21.5	27.4	100.0
	Total	62	78.5	100.0	
Missing	System	17	21.5		
Total		79	100.0		

Figure 1.2 Age of respondents

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	15	19.0	23.8	23.8
	Female	43	54.4	68.3	92.1
	Prefer not to say	5	6.3	7.9	100.0
	Total	63	79.7	100.0	
Missing	System	16	20.3		
Total		79	100.0		

Figure 1.3 Gender of respondents

In terms of years of experience (N=62), 32 (40.5%) of respondents had 16-45 years of experience. Of the entire sample population, 20 (25.3%) had 1-5 years of experience. Ten respondents (12.7%) had 6-15 years of experience, as reflected in figure 1.4.

Years of experience as a 4-H agent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	20	25.3	32.3	32.3
	6-15	10	12.7	16.1	48.4
	16-45	32	40.5	51.6	100.0
	Total	62	78.5	100.0	
Missing	System	17	21.5		
Total		79	100.0		

Figure 1.4 Years of experience of respondents

Geographic location was also determined (N=61). This was the type of county in which the 4-H agent served in their role, not necessarily where they lived. The largest group was rural, with 25 respondents (41%). The second large group was suburban with 13 (21.3%) respondents. The third largest group was urban cluster, which accounted for 12 (19.7%) people. The smallest group was urban, which consisted of 11 people (18%).

Geographic Location Served					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rural – a county that has a population between 1,000 and 2,500 people	25	31.6	41.0	41.0
	Suburban - a smaller community adjacent to or within commuting distance of a city	13	16.5	21.3	62.3
	Urban cluster – a county that has between 2,501 and 50,000 people	12	15.2	19.7	82.0
	Urban – a county that has a central city of more than 50,000 people	11	13.9	18.0	100.0
	Total	61	77.2	100.0	
Missing	System	18	22.8		
Total		79	100.0		

Figure 1.5 Geographical area/county type served by respondents

Results

Research Question 1 - Is there a difference between the perceptions of the role of the Extension 4-H specialist based on ages of 4-H agents?

A one-way between subjects ANOVA was conducted to compare the relationship between age/generation of the 4-H agent and the perception that 4-H agents have as it relates to the role of the Extension 4-H specialist. As shown in Figures 1.6 and 1.7, it was concluded there was no significant difference in perception of the role of the 4-H specialist due to ages of the 4-H agents.

Age of Respondents

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
21-29	8	56.8304	9.27762	3.28013	49.0741	64.5866	38.21	65.36
30-39	11	55.0260	10.08334	3.04024	48.2519	61.8001	35.14	65.36
40-49	10	56.6071	9.94362	3.14445	49.4939	63.7204	34.14	65.36
50-69	14	52.3622	14.60808	3.90417	43.9278	60.7967	13.07	65.36
Total	43	54.8621	11.37302	1.73437	51.3620	58.3622	13.07	65.36

Figure 1.6 Descriptive Statistics – Research Question 1

Age of Respondents

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	149.229	3	49.743	.367	.777
Within Groups	5283.285	39	135.469		
Total	5432.514	42			

Figure 1.7 ANOVA – Research Question 1

Research Question 2 - Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different genders of 4-H agents?

An independent samples T-Test was conducted to compare the relationship between gender of a 4-H agent and the perception that 4-H agents have as it relates to the role of the Extension 4-H specialist. For this question, only males and females were compared to the small sample size of those who chose not to respond. Conclusions demonstrated, as shown in figures 1.8 and 1.9, there was no significant difference in perception of the role of the 4-H specialist due to gender of the respondent, including male or female.

Descriptive Statistics – Gender

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Male	9	56.8730	11.87997	3.95999	47.7413	66.0048	27.29	65.36
Female	31	54.0069	11.81191	2.12148	49.6743	58.3396	13.07	65.36
Prefer not to say	4	49.0536	17.56295	8.78147	21.1070	77.0001	23.21	62.36
Total	44	54.1429	12.21069	1.84083	50.4305	57.8552	13.07	65.36

Figure 1.8 Descriptive Statistics – Research Question 2

Gender

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	171.260	2	85.630	.563	.574
Within Groups	6240.077	41	152.197		
Total	6411.337	43			

Figure 1.9 ANOVA – Research Question 2

Research Question 3 - Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different years of experience of 4-H agents?

A one-way between subjects ANOVA was conducted to compare the relationship between years of experiences of the 4-H agent and the perception that 4-H agents have as it relates to the role of the Extension 4-H specialist. As shown in figures 1.10 and 1.11, it was concluded that overall, there was no significant difference in perception of the role of the 4-H specialist due to years of experience of the respondent.

Years of Experience					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	111.238	2	55.619	.486	.619
Within Groups	4579.794	40	114.495		
Total	4691.032	42			

Figure 1.10 Descriptive Statistics – Research Question 3

Descriptive Statistics - Years of Experience								
					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
1-5	13	56.6978	8.11593	2.25095	51.7934	61.6022	38.21	65.36
6-15	7	51.8673	11.36062	4.29391	41.3605	62.3742	35.14	65.36
16-45	23	55.6957	11.70663	2.44100	50.6333	60.7580	13.07	65.36
Total	43	55.3754	10.56841	1.61167	52.1229	58.6279	13.07	65.36

Figure 1.11 ANOVA – Research Question 3

Research Question 4 - Is there a difference between the perceptions of the role of the Extension 4-H specialist based on different geographical locations of 4-H agents?

A one-way between subjects ANOVA was conducted to compare the relationship between geographical locations of the 4-H agent and the perception that 4-H agents have as it relates to the role of the Extension 4-H specialist. As shown in figures 1.12 and 1.13, it was concluded there was no significant difference in perception of the role of the 4-H specialist due to geographical location of the respondent, including rural, suburban, urban cluster, and urban.

Descriptive Statistics - Geographic Location

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Rural – a county that has a population between 1,000 and 2,500 people	14	58.9643	5.40980	1.44583	55.8408	62.0878	48.29	65.36
Suburban - a smaller community adjacent to or within commuting distance of a city	11	51.1169	16.12386	4.86153	40.2847	61.9490	13.07	65.36
Urban cluster – a county that has between 2,501 and 50,000 people	8	52.1429	11.60508	4.10301	42.4408	61.8449	34.14	65.36
Urban – a county that has a central city of more than 50,000 people	9	55.5397	11.48924	3.82975	46.7083	64.3711	27.29	65.36
Total	42	54.8759	11.51052	1.77611	51.2889	58.4628	13.07	65.36

1.12 Descriptive Statistics – Research Question 4

Geographic Location

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	453.163	3	151.054	1.153	.340
Within Groups	4979.012	38	131.027		
Total	5432.174	41			

Figure 1.13 ANOVA – Research Question 4

Research Question 5 - How do 4-H agents perceive that Extension 4-H specialists are performing their duties?

The first qualitative survey question was “Additional comments pertaining to the role of the state 4-H staff?” The themes that emerged were focus, local needs, and support. The positive comments related that the state 4-H staff members “are important and valuable assets” and “are a great resource.” In the positive comments, responses included that 4-H specialists were important

but perhaps need to focus more effort on the county program and support. In the negative comments, the themes include disconnectedness and lack of focus. One respondent shared, "I feel they need a more hands on role in onboarding new agents, especially those unfamiliar with the TN 4-H program." Another respondent said,

"While I agree that we need to be knowledgeable about the latest research, we also need to remain true to the mission and goals of the 4-H program. Our mission and goals are what set us apart from other youth organizations. Our mission has always been to teach life skills, not just to do programs to make contacts."

The second qualitative survey question was "What should they be doing?" The themes that emerged were timeliness, support, and communication. There was a consistent them around sending out information in a timely manner, as well as responding to requests in a timely manner. Respondents consistently discussed support for the county program, including making county visits to better understand the work that occurs in the county 4-H programs. Related to communication, better communication was addressed as well as being concise in messaging. One respondent shared that, "the state staff should make efforts to visit each county, in-person, to meet agents and hear their needs first-hand."

The final qualitative survey question was "Are the state 4-H staff members (specialists) doing what they should be doing?" This information was compiled using QDA Miner. The percentage of text associated with codes within this qualitative segment by question ranged from 0.41 to 29.03, as shown in figure 1.14. The lowest and highest percentage both exist under the category of communication. The themes that emerged were communication, disconnectedness, responsiveness, and need for additional support. Comments focused on the work of the state 4-H staff members included "exceeded expectations," "were eager to answer questions," "were

helpful," "championed our youth," and were "growing the program." In the positive comments, several individual staff members were named for the outstanding job they were doing. One respondent stated, "I believe that they are and that they are doing a wonderful job! I love working alongside our 4-H specialists! They are a great help and are a great example of what 4-H is all about!" Respondents indicated that there was a lack of communication between the specialists on campus and the 4-H agents. Additionally, there was a disconnect with both geographic and position responsibilities. Comments were made in relation to the specialists being more proactive in providing up to date information as well as the need for additional state 4-H staff employees to ease the burden. One respondent stated, "busy folks with good hearts but if you aren't near Knoxville or Nashville, you feel as if you are off the state 4-H staff's radar."

	Q3	Q2	Q1
Communication			
Responsiveness	2.35	29.03	10.92
Disconnected		0.41	1.37
Resources			
Needed resources	4.59	3.08	25.60
County Focus		3.38	15.36
Funding	3.18	2.67	3.19
Staffiing	4.24	2.36	7.39
Engagement			
Visibility	2.71	2.56	
County visits		6.87	2.39
Collaboration	3.18	9.74	

Figure 1.14 Percentage rate by code – Research Question 5

In terms of terms that surfaced through all questions in the qualitative responses, some of the most prevalent terms included staff, time, and events, as demonstrated in figure 1.15. The second most commonly used term was county and the first was agents. The largest emphasis from the text used within the responses focused on the county program and the agents within those counties.

Figure 1.15 Word Cloud – Research Question 5

Summary

Quantitative findings from this study have answered the first four research questions and have demonstrated that there is no significant difference in perception of the role of the 4-H specialist due to any of the following factors: age, geographical location of the respondent,

gender, or years of service as a 4-H agent. The qualitative component of the study, which addressed how 4-H agents perceived that Extension 4-H specialist were performing their duties, was answered with mixed responses. As noted previously, common themes emerged with focus areas such as a need for better communication, county support, and responsiveness.

CHAPTER V

DISCUSSION

Introduction

The purpose of this mixed-methods study was to investigate the role of the state-level program experts, known as 4-H specialists, as perceived by field-based county Extension 4-H agents. This study determined participants' perceptions of the role of the specialists. The study addressed five research questions through responses from county Extension 4-H agents.

Four research questions considered, "Is there a difference between the perceptions of the role of the Extension 4-H specialist based on:

- different ages of 4-H agents"
- different genders of 4-H agents"
- years of experience of 4-H agents," and
- different geographical locations of 4-H agents"

The first four research questions were addressed using questions on a Likert scale. The fifth research question was addressed using open-ended questions.

Findings

All 13 questions on the Likert Scale were analyzed based on each previously listed variable. In all cases, the findings concluded there was no significant difference in perception of the role of the 4-H specialist due to any variable, which included age, gender, years of

experience, and geographical location. For the open-ended questions, the responses were coded and examined for thematic analysis. Responses from the open-ended questions had several themes, including challenges in the area of communication. Comments made by respondents indicated that, at times, receiving information in a timely manner was a challenge. This included responding to e-mails and returning phone calls. Additionally, it was noted that state 4-H specialists did not always disseminate information in a timely manner, including event and contest guidelines and information. Related to a need for resources, there were several comments made related to the need for a focus on county programming and that the county program should be a focus versus state level priorities and events. In terms of being connected, some respondents shared that the further they are from campus geographically, the less connected the 4-H agents are to the state 4-H office.

These responses were informative and will help guide further discussion. The county 4-H agents are focused on their county program and want resources and help to benefit youth locally. They would like timely information and a reasonable response time from questions asked of the state 4-H specialists.

Limitations

This study is limited in its scope due to limitation of the population sample. The study was limited to Extension agents with 4-H responsibility who work in Tennessee. Additionally, the study was limited based on cooperation of sample. Approximately 30% of the 4-H agents in Tennessee completed the survey instrument.

Generalizability

In terms of generalizability of results, this study could have implications in other state 4-H programs as each state in the nation has county based 4-H agents and a team of state level Extension 4-H specialists who support their work. This study could be replicated within each state for localized results or nationwide to get a broader understanding of perceptions related to the state level specialist. Related to threats to validity, the researcher addressed bias within the study by addressing relational history as well as by attempting to control potential bias. This was handled by confirming that their responses were confidential.

Implications

Practitioners in the 4-H organization could benefit from this study and its findings. This study will hopefully open the door for county 4-H agents and Extension 4-H specialists to engage in conversation where communication challenges exist and determine how they can be addressed. Additionally, findings from this study will provide an outlet for further discussion on how Extension 4-H specialists can best meet the needs of the county 4-H agents and their respective county 4-H programs.

Tennessee 4-H has a strong 4-H program. There are always opportunities for growth and re-direction, and this study will help open the doors to this type of conversation. Within many organizations, there exists a perceived disconnect between the various levels of staff. Providing feedback for Extension 4-H Specialists to understand how their roles are perceived will be helpful as the state 4-H staff continues to serve 4-H agents. Likewise, county 4-H agents will need to be open to feedback from those Extension 4-H Specialists in terms of feedback and thought-provoking conversations on how the program is moved forward.

From the researcher's viewpoint, there is room for growth in the area of communication, ensuring that all levels of the organization are on the same page, or are least talking about pressing issues and upcoming events and activities. As the leader of the 4-H program, the researcher can establish a framework for better communication through county visits where specialists will be asked to visit counties, either face-to-face, or virtually to learn more about the county programs. This type of interaction may prove valuable as the communication gap could be closed.

As previously mentioned, Frooman (1999) indicated that people within an organization, in this case 4-H agents, who have been afforded an opportunity to provide input into the organization's functions may feel more encouraged and empowered. The same could be true for our 4-H agents. If they are given an outlet to interact more closely with state level 4-H specialists and feel that they are a part of the process and even solution, then a greater sense of connectedness could occur. To address this, the researcher plans to establish 4-H program teams, which will be comprised of 4-H agents, volunteers, youth, and state level specialists. These teams will be divided by content area and will help provide overall guidance and recommendations on programming efforts within each content area.

Additionally, everyone should be reminded that the county 4-H program is the heart of Tennessee 4-H, and programs and activities should be developed with the county 4-H program in mind. The state level specialists are dedicated to serving all 95 counties in Tennessee, and should always remember that each of programs are intended for all audiences, from the most rural counties to the most urban. At the end of the day, everyone should focus on how they best serve the youth of the state of Tennessee.

Recommendations for Future Research

As a follow-up to this study, future research could utilize regional 4-H program leaders and other Extension middle managers as respondents to access their perception of the role of the Extension 4-H specialist. Additionally, subject matter specialists within the academic departments on the University of Tennessee Knoxville campus could also be respondents for a potential study as these specialists work closely with Extension 4-H specialists. A more in-depth study on the perception of the county 4-H agents by local members and volunteers is also a research project that could yield tremendous results and feedback for a county based 4-H program. On the same note, there could be an opportunity for Extension 4-H specialists to provide their input in terms of their perception of the role of the 4-H agent. Since these specialists do not supervise county level 4-H agents, there has never been that type of discussion or study. As staff turnover is moderate, a follow-up study to this one in 5-10 years would also be beneficial to help further strengthen the body of literature.

Conclusion

This study provided an opportunity for Extension 4-H agents to have a voice in providing feedback on their perception related to the role of the state level Extension 4-H specialist. No study like this has been completed within Tennessee since 1994. Few Extension agents remain that were working during that time frame, and no Extension 4-H specialist was working in Tennessee during that time.

The study will have lasting benefit as future conversations occur that help direct the work of all those involved in 4-H work in Tennessee. Further research will hopefully be done that will impact Tennessee and other states. This study will also be helpful to UT Extension leadership as

they make staffing decisions and provide resources to continue to drive the 4-H program forward.

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APPENDIX A

APPROVAL LETTER

THE UNIVERSITY OF TENNESSEE
CHATTANOOGA

Institutional Review Board
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TO: Justin Crowe **IRB # 22-119**
Dr. Beth Crawford, Dr. David Rausch

FROM: David Deardorff, Interim Director of Research Integrity
Dr. Susan Davidson, IRB Committee Chair

DATE: 10/20/2022

SUBJECT: IRB #22-119: The Role of the Tennessee 4-H Specialist as Perceived by 4-H Agents

Thank you for submitting your application for exemption to The University of Tennessee at Chattanooga Institutional Review Board. Your proposal was evaluated in light of the federal regulations that govern the protection of human subjects.

Specifically, 45 CFR 46.104(d) identifies studies that are exempt from IRB oversight. The UTC IRB Chairperson or his/her designee has determined that your proposed project falls within the category described in the following subsection of this policy:

46.104(d)(2)(i): Research only includes educational tests, surveys, interviews, public observation and recorded information cannot readily identify the subject (directly or indirectly/linked)

Even though your project is exempt from further IRB review, the research must be conducted according to the proposal submitted to the UTC IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an Application for Changes, Annual Review, or Project Termination/Completion form to the UTC IRB. Please be aware that changes to the research protocol may prevent the research from qualifying for exempt review and require submission of a new IRB application or other materials to the UTC IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the UTC IRB as soon as possible. Once notified, we will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval.

For additional information, please consult our web page http://www.utc.edu/irb or email instrb@utc.edu.

Best wishes for a successful research project.

APPENDIX B

INSTRUMENT

Please complete the below questions.

To what extent "should" the state 4-H staff:

Click to write the question text

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongl Agree
Conduct a needs assessment to determine the needs of Tennessee's youth?	○	○	○	○	○
Evaluate programs and materials?	○	○	○	○	○
Participate in advanced training and professional activities to keep up with new trends and methodology in youth development?	○	○	○	○	○
Coordinate the procurement of interesting and timely educational teaching materials and curricula?	○	○	○	○	○
Serve as a resource in 4-H youth development by providing research based information to county 4-H agents related to current trends in youth development?	○	○	○	○	○

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Click to write the question text

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongl Agree
Serve as a resource in 4-H youth development by making programming recommendations?	○	○	○	○	○
Serve as a resource in 4-H youth development by supplying answers to questions asked by county 4-H agents?	○	○	○	○	○
Serve as a resource to county 4-H agents by responding to requests within a reasonable time period?	○	○	○	○	○
Develop and conduct useful in-service training for county 4-H agents and volunteers that address the delivery of youth programming to 4-H members?	○	○	○	○	○
Provide timely notification to agents regarding new trends and opportunities in 4-H and youth development, changes in programs, and event information?	○	○	○	○	○

	Strongly Disagree	Disagree	Neither disagree nor agree	Agree	Strongl agree
Identify and gain assistance from donors to support and expand educational 4-H programs?	○	○	○	○	○
Perform as a unified team working toward a common educational vision and mission?	○	○	○	○	○
Assist in the development of competent volunteer leaders?	○	○	○	○	○
Coordinate public relations, publicity, and marketing of statewide 4-H programs and their educational impacts in order to create awareness and interest among the public?	○	○	○	○	○

Additional comments?

Other recommendations related to what you feel the state 4-H staff should be doing?

Overall, are the state 4-H staff members (specialists) doing what they should be doing?

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VITA

Justin Ernest Crowe was born in Selmer, Tennessee, McNairy County to the parents of Joe and Carolyn Crowe. He is the second of two children. He attended Bethel Springs Elementary School and McNairy Central High School, graduating in 1998. Upon graduating from high school, he earned a Bachelor of Science in Social and Behavioral Sciences from Freed-Hardeman University, graduating in 2002. He served as an Extension Agent in 4-H Youth Development in Davidson County from 2002-2008. While working in Davidson County, he earned his Master's of Arts in Education, Curriculum and Instruction from Tennessee Tech University in 2003. In 2008, he relocated to the University of Tennessee at Knoxville as an Extension Specialist in 4-H Youth Development, overseeing state-wide teen programs, writing and managing numerous grants, and coordinating and overseeing 4-H All Star High Council, State 4-H Council, Southern Region 4-H Teen Leadership Conference, the 4-H Ambassador Tour, 4-H Fall Judging, and State 4-H Roundup. From 2009 – 2023, he has pursued his Ed.D in Learning and Leadership from the University of Tennessee at Chattanooga, completing all requirements for graduation by May 2023.

He married his wife Julie A. Johnson Crowe in 2014. From 2020 to present, Justin Crowe serves as the Director and State 4-H Program Leader, 4-H Youth Development at the University of Tennessee Extension. Responsibilities include: providing visionary leadership and direction for the planning, development, implementation, evaluation, and reporting of a statewide 4-H Youth Development Program; serving as liaison between the UTIA, stakeholders, partners,

donors, alumni, 4-H youth, and the Tennessee 4-H Foundation; establishing and enhancing partnerships with key state and national partners; and leading a team of 50+ individuals in support of 4-H youth development work. Justin Crowe is the recipient of several local, state, and national accolades and serves on multiple key state and national committees. He also teaches undergraduate level courses in the Agriculture, Education, Leadership, and Communication (ALEC) Program at the Institute of Agriculture, University of Tennessee. His work with 4-H Youth Development and the Institute of Agriculture has afforded him many opportunities to take high school 4-H and collegiate 4-H and FFA students on national and international exchange programs to Hawaii, Alaska, the U.S. Virgin Islands, Puerto Rico, and Africa.