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**Volunteer Management Needs Assessment
of the
Tennessee 4-H Program**

A Thesis Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

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ABSTRACT

The purpose of this descriptive study was to conduct a state-wide needs assessment of Tennessee 4-H Youth Development Extension Agents to determine the perception in working with 4-H Volunteer Leaders and the knowledge level of volunteer management. This study also determined the need for a formalized 4-H Volunteer Leader management system. Targeted participants were University of Tennessee (UT) Extension Agents and Tennessee State University (TSU) Extension Agents with 4-H job responsibility. Participants were asked to complete a four part questionnaire instrument. Components one through three of the instrument were used to determine the need for a formalized 4-H Volunteer Leader management system, the knowledge level in managing and the perception of working with 4-H Volunteer Leaders. The final component was used to collect demographic information.

After completion of a pilot study, 161 Extension Agents were targeted to participate in the study. The questionnaire was administered on web-based data collection system known as Survey Monkey. Results indicated 90% of Extension Agents agreed there is a need for readily available, web-based materials. Results also indicated a need (66% agreeing) for a comprehensive 4-H Volunteer Leader management system. Also, results found high proficiencies, up to 97%, in both knowledge levels of managing 4-H Volunteer Leaders and perceptions of working with 4-H Volunteer Leaders. Demographic information was correlated among measures of knowledge, perception and the need for a formalized 4-H Volunteer Leader management system. Significant correlations were found between risk management of 4-H Volunteer Leaders and Extension tenure, also between Extension tenure and the perception of 4-

H Volunteer Leaders being welcome within the school system. Significant correlations were also between recruiting volunteers and outside of Extension volunteer/employee management; between outside of Extension volunteer/employee management and removing 4-H Volunteer Leaders. Implications indicate a need for additional resources to provide training and information for both agents and 4-H Volunteer Leaders. Findings also indicate materials should be web-based for easy access for both agent and 4-H Volunteer Leader use. Data responses show there is a need for a formalized 4-H Volunteer Leader management system that would encompass all aspects from recruitment to retention of 4-H Volunteer Leaders.

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Chapter I

Introduction

“We make a living by what we get, but we make a life by what we give”

- Winston Churchill

Nationally, the 4-H program began to be widespread in the early 1900's. The 4-H program was first organized in Ohio (4-H National Headquarters, 2009) as project clubs, such as tomato and corn clubs. The purpose behind 4-H was to bring education from the universities to rural families for better results in their daily lives. With teaching methods used in boys and girls clubs, the hope for the 4-H program was to inspire learning and knowledge. This knowledge would transfer to the parents of the youth, promoting methods in agriculture, which would benefit and change lives (Enfield, 2001). The 4-H program has been an integral part of the lives of many Tennesseans since its introduction in 1910, the book, *4-H A Tennessee Tradition* (n.d.). The 4-H program has covered a wide array of educational topics for the improvement of youth in Tennessee. In 2008 there were 301,958 Tennessee youth grades 4th through 12th enrolled in the 4-H program (University of Tennessee 4-H, 2009) According to Welch, there are currently 167 University of Tennessee Extension Agents with 4-H Youth Development responsibility (D. Welch, Extension Evaluation and Staff Development, University of Tennessee, personal communication, June 23, 2009) and approximately 15,813 volunteers *Tennessee 4-H: A Timeless Tradition [Brochure]* (2007) that carry out educational programs. In addition, Tennessee State University has 13 Extension Agents with 4-H responsibility. In an effort to stay

current, 4-H programs are delivered to youth in a variety of ways, such as, in-school club meetings, after school club meetings, special project groups and specialized camps.

In serving this population, the utilization of volunteers are vital. 4-H Volunteer Leaders help deliver many programs for the youth of Tennessee and contribute their personal time and resources to help Extension Agents reach a greater number of these youth. It is estimated that a volunteer hour is worth \$20.25 (Independent Sector, 2009). Therefore, the need for effective management and continuous recruitment of volunteers is essential to program success.

Need for the Study

According to 4-H leaders and 4-H Extension Agents, currently there is no formalized long-term support or management system for Tennessee 4-H Youth Development Extension Agents and 4-H Volunteer Leaders to follow. With economic challenges and reductions in budgets for non-profits, it is essential to have an effective management system to continue to effectively serve the target populations. According to the Points of Light Foundation & Volunteer Center National Network (2004) the first step in planning a volunteer program is to conduct a need assessment of the communities in which the programs are delivered. This study is a needs assessment that will help determine if materials and resources are needed to help Extension Agents effectively manage volunteers. This study will provide support as to whether a volunteer management program will help the Tennessee 4-H organization and if a formalized management program is qualified as a need. This study will determine the need for a volunteer management system within the Tennessee 4-H Youth Development department as determined by current 4-H Extension Agents.

Purpose of the Study

The use of volunteers to lead 4-H youth development programs has been a growing trend within the Cooperative Extension Service (Sinasky & Bruce, 2007). The purpose of this descriptive study was to conduct a state-wide needs assessment of Tennessee Extension Agents with 4-H responsibility to determine the perception in working with 4-H Volunteer Leaders and the knowledge level of volunteer management. This study also determined the need for a formalized 4-H Volunteer Leader management system. The indications of the study will be made available to 4-H State and Regional Leaders working closely with 4-H Youth Development Extension Agents. Findings from this study will further be used to make recommendations for future 4-H Volunteer Leader Management programming and training.

The specific objectives of this study were:

- 1) To determine specific demographic information of the Tennessee Extension Agents with 4-H job responsibility;
- 2) To determine the knowledge level of volunteer management perceived by Tennessee Extension Agents with 4-H job responsibility;
- 3) To determine the perceptions of Tennessee Extension Agents with 4-H job responsibility in working with 4-H Volunteer Leaders and;
- 4) To determine the need for an expanded formalized 4-H Volunteer Leader management system.

Chapter II

Review of Literature

Theoretical Framework

The legacy of 4-H volunteers which started with the organization in the 1900's still exists today and the training and competency levels of professionals working with volunteers should be as in-depth and substantial as the volunteer duties that are performed. In addressing the growth of volunteerism, some state level Cooperative Extension faculty have put forth effort to support volunteer management by developing models for volunteer management and models for volunteer educational needs. There are several literature and research-based articles that discuss the subject of volunteer management and volunteer use within the Cooperative Extension Service. Many university systems have also employed in-depth systems to manage the ever-growing volunteer populations. Some examples of universities that have developed volunteer management programs are University of Florida, University of Kentucky, Michigan State University and Washington State University (Boyce, 1971; Culp, Deppe, Castillo & Wells, 1998; Stedman, 2004). One example, the University of Florida, conducted a needs assessment to determine the knowledge and expertise of professionals who supervise Extension volunteers. For the University of Florida study, it was found that even after employing volunteer management models, additional management materials were in demand from both extension professionals and the volunteers who serve. The University of Florida results additionally represented the need for a comprehensive-long term support system for Extension Agents who supervise volunteers. From these study findings, the Center for Volunteer Leadership Development (CVLD) developed a comprehensive management system for their agents and

volunteers to use. This system included nine teaching modules and in-service trainings that allow both Extension professionals and Volunteer Leaders to work at their own pace. These nine modules include: Volunteerism in America, motivating volunteers, building a volunteer staff, recruiting volunteers, legal issues in volunteer management, evaluating volunteer programs, volunteer leadership, supervision of volunteers, and service-learning (Rudd, Stedman & Morgan, 2002). For comparison, the Mississippi 4-H program is very similar to that of Tennessee. Whereas Tennessee has a multitude of in-school clubs, the state of Mississippi has many 4-H in-school enrichment clubs. Mississippi 4-H also has a vast population of 4-H Volunteer Leaders, with 7,459 volunteers in 2008. The Mississippi 4-H program developed a web-based self-study series available for volunteers and parents. This program is equipped with handouts and answers available to the study modules (Mississippi State University Extension, 2009).

In the past, the Tennessee 4-H program has employed elements of the T.A.X.I (Taking Anybody into Expanded Involvement) volunteer management system. Publications were printed with example interview questions for potential volunteers (University of Tennessee Agriculture Extension Service, 1997). Currently, the T.A.X.I. system is not being printed or employed by the Tennessee 4-H program. Another state within the Cooperative Extension Service, the Louisiana 4-H Youth Development program, developed a volunteer policy handbook for 4-H Agents and volunteer managers. This handbook outlines an in-depth system of both explanation and descriptions of volunteers, as well as developing and implementing a volunteer system. Within this system topics include; identifying volunteers, selecting, orienting, training and risk management of volunteer leaders (Louisiana State University, 2002).

Historical Perspective and Benefits of 4-H Youth Development Programs

4-H began to appear nationally in the late 1890's and began evolving in the early 1900's (Enfield, 2001). In 1914, the Smith-Lever Act established the Cooperative Extension Service which linked Land-grant colleges to the United States Department of Agriculture (Warner & Christenson, 1984). Programs within this Act, such as the 4-H program, helped to bring University research to boys and girls clubs. The 4-H program serves at local, regional, and state levels, with most 4-H programs being delivered through the 3,150 counties nationwide (Warner & Christenson, 1984). 4-H nationally touches the lives of more than 6.8 million youth that are between the ages of 5 to 19. Nationally, 4-H also includes the use of more than 600,000 adult volunteers annually (Russell, 2001). In the beginning, 4-H was developed to teach rural school children the aspects of agriculture in which they were not being exposed to in the traditional school setting. Many 4-H clubs met after school, in project groups which were usually led by an older 4-H member officer or an adult volunteer. Many times these groups were split into a boys club and a girls club and the members shared the progress of the project in which they were working (Enfield, 2001). The 4-H program today reaches youth by many methods, including but not limited to, 4-H clubs in a school time setting, after-school clubs, project groups, camps and special school enrichment programs. 4-H also is open to diverse cultures and diverse economic backgrounds from every type of community. Founded over 100 years ago the 4-H program was a forerunner in youth organizations which offered non-formal education to reach youth (Enfield, 2001). Non-formal education can take place at various locations and 4-H emphasizes on various programs, camps and project groups. The non-formal education aspect is beneficial and stands alone among the traditional school programs in many ways. In the 4-H program, the youth

participate by personal choice and experience experiential learning and life skill development. These programs help youth gain the opportunity to develop personal relationships with other youth, and also with the adults that make up the many volunteers of 4-H. Furthermore, the 4-H program provides opportunities for youth to develop positive self-images, respect of others and learn a host of environmental skills which in turn helped the youth to be more physically, mentally and emotionally fit (Rasmussen, 1989, p.175). Through this type of interaction, youth develop human relationships with many caring individuals within the community and learn the benefits of their surroundings.

Recent research (Russell, 2001) has found that with after school activities in which the youth chooses to be tailored to their interest, that many positive benefits are gained. Raising self-esteem, improved academic performance and goals, lower rates of youth delinquency, higher levels of political and civic participation and leadership skills are just a few benefits gained by this type of education. Research has also shown that a variety of after-school activities provide a better learning environment rather than being limited to the same type of activity (Russell, 2001).

Parent and community involvement is another aspect of 4-H which makes it beneficial for youth. Community involvement, with parents, has reported to have an effect on higher grades, better self-esteem and a better relationship with peers (Russell, 2001). 4-H Volunteer leaders have reported that youth involved in a 4-H activity benefited from intellectual, social, and psychological development (Taylor-Powell, Hutchins & Reed, 1997). In addition, youth were reported to gain empathy, self-esteem, self-worth, pride and confidence. Within the social aspect, youth in 4-H learned citizenship skills and community aspects of how things are accomplished within the community. Intellectually, youth learned about leadership, teamwork,

public speaking, cooperation and organizational life skills (Russell, 2001). Through a variety of projects, informal and non-formal education, youth leadership, experiential learning and volunteer programs, the youth involved in 4-H benefit in many ways. In a study by Wiebers (2001), 4-H can work through programs such as Character Counts! In this study educators agree that the Character Counts! program had a positive effect on student behavior. It is hard to determine the positive impact that every aspect of 4-H work has on the lives of the youth it touches. Teaching life skills is not new, but is a very important aspect of what 4-H offers and can affect many lives even beyond that of the youth it touches.

Volunteer Management

Volunteering has deep roots in American society. It has long been a part of the American tradition and over half of the American people will volunteer in some capacity during a year's time. It has been estimated 44% of adults, that is over 83.9 million people, will volunteer within a year. This volunteerism is valued at over \$239 billion per year (Independent Sector, 2009). These volunteers give their time to profit, non-profit, religious, youth, health, and environmental organizations. All age groups are involved in volunteering. Also, volunteers come from every background, educational level, socioeconomic status and gender. Lynch and McCurley (1999) cited several reasons volunteers become involved with organizations. Basic motivations for volunteering are including but not limited to, helping others, know someone participating or had children who were involved, religious concerns or are genuinely interested in the activity. If an organization desires to be successful in recruiting and maintaining volunteers, some type of volunteer management system must be employed. An organization must first do needs assessment of why volunteers would be an important addition. Benefits might possibly include:

strengthening bonds within the community, better assisting existing cliental, ability to recruit additional cliental, and of course a form of free labor or reduced cost to the organization.

Disadvantages of utilizing volunteers included lack of control of volunteer actions, the need for volunteer supervision, liability of volunteers, difficulty in recruiting qualified volunteers and a possible impact on paid employee positions (Lynch & McCurley, 1999).

Many sources have different ideas or management techniques for a successful volunteer program. Some of the most widely known and recognized volunteer management programs have step by step procedures for recruiting, maintaining and rewarding volunteers. Ellis (2002) stated that you must define the work of volunteers for this is the foundation for all recruitment efforts. Ellis also stated that it is very important to put the volunteer job description in writing as this is the basis for recruiting the most qualified volunteer. Hager and Brudney (2004) focused on nine recommended practices for volunteer management. These nine procedures include: supervision and communication with volunteers, liability coverage, matching and screening volunteers to a job suited for them, details on volunteer involvement, job descriptions and policies, recognition, volunteer impact, professional development for the volunteers, and paid staff trainings in volunteer management areas. Hager and Brudney feel that unless organizations focus on successful volunteer management techniques they will fail in recruiting, satisfying and holding onto volunteers. In other studies of successful volunteer management techniques authors Grossman and Furano (2002) cited three crucial elements to a volunteer program. These include screening volunteers to place in an appropriate position, orientation and training of volunteers and ongoing support and management of volunteers and the programs in which they are involved.

Lynch and McCurley (1999) identified six basic steps to a successful volunteer management program. They include job development and design, recruitment, screening and interviewing, orientation and training, supervision and recognition. Volunteer job description is essential in laying the groundwork and responsibility of what is expected from the volunteer. The job description is the important planning tool that will help volunteers understand and get started with their work. The next step is recruitment. There are many ways to successfully recruit volunteers and the type of recruitment may depend on what the job calls for. Lynch and McCurley (1999) outlined three recruitment methods. The “warm body” approach works best when you need a very large amount of volunteers for a short time or you have a job that does not require any specialized qualifications and one that most people can do with training. Methods for this type of recruitment can include brochures, posters, and word of mouth. The second recruitment approach is targeted recruitment. This type of recruitment works best when you have a job that requires some special skills or some type of special experience. The third type of recruitment is concentric circles recruitment. This type involves people which are already in contact with the organization or are familiar with the position. After recruitment, the next step is interviewing possible volunteers. Interviewing can have several stages and must be guided to make sure the best qualified person fills the position. After interviewing and placement of the volunteer has taken place, the next step is orientation and training. Orientation and training have many levels which prepare the volunteer for organizational operating functions, how they are expected to perform the job and explanation of general policies and procedures. Proper orientation and training are essential to volunteer retention. Following these steps is supervision. This is similar to supervision of any job, except extra attention should be paid to flexible

management and flexible time schedules. Lynch and McCurley outlined the final step as volunteer recognition. Recognition can come in many forms as awards, pins, certificates, events and celebrations, and other rewards. It is essential that volunteers receive some type of recognition, this is also a key step in retaining volunteers within the volunteer management system. The aforementioned are just some common tactics of the in-depth volunteer management system.

Training Volunteers with the Adult Developmental Theory

Malcolm Knowles spent most of his adult life concentrating on informal adult education, self-direction and andragogy (Knowles, 1950). Knowles theorized that adults learn differently from children and that human relations deal with the most significant problems of our age. Adult learners are self-directed and they expect to take responsibility for their decisions. Andragogy and adult developmental theory explains that adults need to know the why of learning about a subject; adults also need to learn experientially. Adults approach learning as problem-solving and adults will learn best if the topic is of immediate value to them (Knowles, 1950). When preparing and managing adults for volunteer leaders within the 4-H Youth Development program one must take into account that adults should acquire a mature understanding of themselves. Adults should look at and understand their needs, motivations, capacities and interests. Adults who would be targeted for youth leadership activities should develop an attitude of love, respect and an acceptance of others (Knowles, 1950). These types of attitudes are the basis for all functioning human relationships. Adults that learn these basics of love, respect and acceptance can distinguish between ideas and people and are non-threatening when challenging these ideas. Furthermore, adults should develop an enthusiastic attitude toward life. They should accept and

embrace change and realize that this is part of learning. Adults should learn to react not to behaviors, but to the cause of the behavior, and they should learn to look for solutions.

Adults should acquire skills needed to achieve the most potential from their personalities (Knowles, 1950). They should understand that they can have a positive contribution on society. Adults should also understand the value of experience. They should value tradition and respect the values of others. Adults should understand their society and be able to direct positive societal change. They should be well versed in the democracy of their society and be able to take part in governmental, economical and international affairs (Knowles, 1950). In managing adult learners and adult leaders it is imperative to review these concepts to further help you engage and direct adults as they become 4-H Volunteer Leaders within the youth development program.

Volunteer Systems used within the Cooperative Extension Service

Within the Cooperative Extension Service volunteers are essential to the success of the 4-H program (Sinasky & Bruce, 2007). Dating back to 1952, Schulp thought the “network of county extension agent and local volunteer leaders” (p. 344) as the future of success in Extension programs (Schulp, 1952). Boone, Safrit, & Jones (2002) found that “volunteer involvement not only is critical to the successful implementation of the program...but may also serve as important adult learning for the volunteers themselves” (p.184). Today, volunteers are a very vital part of the Cooperative Extension Service. It has also been stated that one in every eight Americans has volunteered for the Cooperative Extension Service (Seevers, Graham, Gamon, & Conklin 1997). Volunteers are also essential to the delivery of youth educational programs within Cooperative Extension. In 2007, more than 410,000 volunteers (National 4-H Headquarters, 2009) helped

carry out 4-H programs. Since volunteers are essential to all aspects of Extension, this makes every county-level extension agent a volunteer manager or administrator.

Boyce (1971) created the I.S.O.T.U.R.E. Model (Identification, Selection, Orientation, Training, Utilization, Recognition, and Evaluation) for Cooperative Extension to utilize for volunteer management. Numerous other models of volunteer management programming have been suggested for Extension use (Schmiesing & Safrit, 2007). These models include: The LOOP Model, (Locating, Orienting, Operating, and Perpetuating). The LOOP Model for volunteer management is very simplistic and has been used within the Cooperative Extension organization by many states (Seevers, et al., 1997) (Penrod, 1991). Kentucky Extension has used the GEMS Models of Volunteer Administration. These phases include: (Generate) needs assessment, writing job descriptions, identifying, recruiting, screening, selecting; (Educate) orienting, protecting, providing resources, teaching; (Mobilize) engaging, motivating, supervising; (Sustain) evaluating, recognizing, retaining, redirecting and disengaging (Culp, Deppe, Castillo & Wells, 1998). The GEMS model has 18 phases. These are needs assessment, position description, identifying, recruiting, screening, selecting, orienting, protecting, providing resources, teaching, engaging, motivating, supervising, evaluating, recognizing, retaining, redirect and disengaging. A study by Culp and Kohlhagen (2004) found that the disengaging phase was the least competent phase among Extension Agents and the providing resources was the greatest competent phase. Kentucky 4-H Extension has a volunteer program in place using the GEMS module and has abundant resources and volunteer job descriptions available to their agents. Ohio Extension did a very similar study with the GEMS module and found that their agents ranked the Educate category as the highest frequency of use.

The authors noted that Ohio Extension has mandatory annual continuing education requirements for their volunteers (Culp and Kohlhausen, 2004). Ohio State University Extension also outlines six specific types of 4-H volunteers based on job description and the age of the volunteer (Culp, 1999). Florida 4-H has used the ISOTURES model for many years to assist Extension Agents in volunteer management. Even with using the ISOTURE model it was unclear if Extension professionals in Florida were supplied enough information to lead successful volunteer programs. In 2000, Easton and Rudd did state-wide need assessment of Florida to determine the knowledge and expertise of the professionals in Extension who supervised volunteers (Rudd, Stedman, & Morgan 2002). In this study, the authors found that most respondents felt confident in volunteer orientation, but felt they needed more training in the areas of identifying volunteer needs, recruiting, training, recognition and evaluating volunteers. In response, the Center for Volunteer Leadership in the Department of Agriculture Education and Communication at the University of Florida developed a comprehensive series of in-service trainings, teaching modules and an in-depth resourceful website to help Extension professionals in volunteer management. The Center for Volunteer Leadership developed nine resource training modules as a result of this study. These training modules are self-paced, offered in a variety of teaching techniques and are available to Extension personnel as well as volunteers. Previously, Tennessee Extension has used the T.A.X.I. (Taking Anybody into Expanded Involvement) system to help manage volunteers (University of Tennessee Agriculture Extension Service, 1997) as well as the ISOTURE model. Boyd (2003) completed a national study to find the competencies needed for volunteer administrators. He recommended that organizations which are volunteer driven, especially Cooperative Extension, have employees that are competent in organizational

leadership, system leadership, organizational culture, personal skills and management skills.

Boyd's (2003) study recommended that the agriculture education system create undergraduate or graduate studies to prepare students to effectively lead and manage volunteers. This study also recommended that online resources be available to help school-based and Extension faculty in the areas of volunteer management competencies.

National Framework for 4-H Volunteerism

A comprehensive guide has been created to highlight the common, although complex, themes that center around 4-H volunteerism. The National Framework for 4-H Volunteerism helps to identify current literature in the subject, societal trends and addresses key themes that lead to quality youth development programs. The vision of the framework is to connect youth with caring leaders and the mission includes advancing knowledge, building capacity and fostering innovative systems to engage volunteers who work within the 4-H youth community. The Framework was developed for leadership of all levels to utilize in their 4-H volunteer programs. The Framework was intended to help leaders communicate the value of volunteers within the 4-H system, to stimulate discussion and to foster the engagement of volunteers within the program (Stone & Edwards, 2008).

Core elements of the Framework include: creating safe environments, engaging volunteers, administering volunteer management systems, identifying the benefits of volunteering and strengthening partnerships. In order to create safe learning environments, volunteers should undergo a screening process, training, and receive a standardized core orientation to enhance the creation of a safe learning environment for youth with age appropriate activities. The volunteers should also understand risk management issues, insurance, and be able

to clearly communicate with all stakeholders of the organization. Within the element of engaging volunteers, the volunteer management system should be able to be responsive to the many challenges and changes reaching beyond the traditional demographics to readily encompass a diverse audience of volunteers. The volunteers should mirror the youth population they serve and modern, innovative communication should be used for the benefit of both the youth members and the volunteers to further enhance their education. When administering volunteer management systems the Extension staff should successfully engage volunteers and equip them to deliver quality programs. Extension personnel must identify themselves as supervisors and program managers. They must be knowledgeable in creating successful volunteer programs and also must have the training and resources available in order to gain these skills. Volunteers will also benefit from the knowledge and skills acquired from personal development opportunities through programs offered by the organization. In delivering these quality programs that address the needs of the volunteers and the youth they serve the partnerships and positive images of the 4-H program are strengthened with participants, advisory groups, stakeholders and the general public. These elements or standards help identify the need for volunteer trainings, comprehensive management systems, diversity among volunteers, knowledge, skill development and positive partnerships. When all of these elements are understood by the leadership audience then an effective volunteer system can be implemented (Stone & Edwards, 2008).

The Framework also takes into consideration the critical relationships of the volunteers and the Extension system. Extension is a very broad-based organization that encompasses a vast number of leaders and key administrators. The Framework states that the way volunteer

development is viewed by Extension administration is pivotal to how 4-H programs are delivered and valued. Supervisory staff strongly influences how 4-H programs are administered. The way the volunteer management program is viewed also depicts the beliefs, values and knowledge of the 4-H program leaders. When long-term, sustainable volunteer management and development programs are in place, volunteers will more likely stay engaged and participate in the program. To be able to involve volunteers from all age groups is critical to a management program as it is also critical that Extension staff be knowledgeable about the way they work with people from different generations. Patterns are shifting from long-term volunteers to short-term volunteers and Extension staff must also accept this challenge. The Framework also states that defining national direction in the 4-H volunteer system requires more than a framework, it requires building and expanding on existing systems within the 4-H program (Stone & Edwards, 2008).

Volunteer Management and the Volunteers that serve 4-H Youth Development

Several states and Extension personnel have studied the 4-H volunteer program for its strengths and weaknesses. Age, 4-H background, children involved in 4-H and the public image of the 4-H program were found to influence the decision to volunteer (Smith, & Finley, 2004). In the Pennsylvania Extension study Smith and Finley (2004) found that most people volunteer for two main reasons. One reason is they were a former 4-H member themselves and the other leading factor was because they had children involved in the program. Also, in this same study most volunteers were female. In a similar study, Smith & Bigler (1985) found that to retain volunteers in the program, four variables of most importance needed to be met and obtained. These were motivation, orientation (training), participation (continued training) and recognition. It was also found that 4-H Youth Development Extension Agents who have a mastery of

volunteer management competencies are more likely to have a successful volunteer program as well as a greater positive community and youth impact due to the volunteer work of the program (King & Safrit, 1998). Fisher and Cole (1993) stated that most volunteer managers get only on-the-job training. Few of these managers have formal volunteer administration training.

Volunteer managers need more formalized trainings to help in the areas of time management, especially when it involves reading, studying and the acquisition of new knowledge (Fisher and Cole, 1993). Due to a large amount of in-school clubs, Tennessee has one of the largest 4-H enrollments with many of the clubs being met by either agents or program assistants. 4-H Volunteer Leaders in Tennessee are used to meet project groups, after-school clubs, community clubs, serve as camp leaders and also conduct some in-school clubs.

Chapter III

Procedures and Methodology

Design of the Study

This was a descriptive study of current Tennessee 4-H Youth Development Extension Agents and any University of Tennessee (UT) and Tennessee State University (TSU) employee with 4-H Youth Development job responsibility. This was a convenience sampling of 148 4-H Youth Development University of Tennessee Extension Agents and employees with 4-H responsibility. Also, an additional survey was conducted with 13 Tennessee State University Extension Agents with 4-H job responsibility. The University of Tennessee had 167 individual Extension Agents with 19 different Full Time Equivalencies (FTE) of 4-H job responsibility. These FTE range in percentages from 5 to 100. Collectively, there are 30 Agents with less than 25% FTE 4-H job responsibility, 25 Agents with 25%-49% FTE 4-H job responsibility, 36 Agents with 50%-74% FTE 4-H job responsibility, 8 Agents with 75%-99% FTE 4-H job responsibility and 69 individuals having 100% FTE job responsibility.

According to Gall and Borg (1996) a pilot study should also be administered to check the accuracy and overall quality of the final questionnaire. A pilot study was conducted surveying 19 individuals from the University of Tennessee Extension, statewide, one individual from each of the 19 percentages of FTE that were not included in the study. The participants were chosen for the pilot study by compiling individual names from each FTE percentage of responsibility. The names were then sorted by FTE percentage of responsibility and placed in a labeled container with like percentages. One name from each container was drawn out for the targeted

pilot study participants. Data for participant email addresses were collected from the University of Tennessee email system and then reworked to a group email listing. The pilot study was conducted in August of 2009. Response rate for the individuals completing the pilot study was 68%. (n=13). Results from the pilot study were tested for reliability using Cronbach's Alpha Reliability Coefficient. Table 1 reports the associated Cronbach's Alpha for each competency area of the instrument.

Penfield (2002) stated that reliabilities greater than .90 are high. Those that are above .80 are moderate to high and those greater than .70 are low. Although Penfield added that an alpha value of .60 is acceptable for social science studies. All coefficients were found to be adequate and satisfactory that the instrument was both reliable and competent. After the completion of the pilot study a question of ethnicity and race was added to the demographics section to collect all possible information for the study.

Upon completion and analysis of the pilot study, an updated list of all University of Tennessee Extension Agents with 4-H job responsibility was secured and the pilot tested individuals were removed from this list. The 148 remaining participants were emailed a survey in September of 2009. Dillman's tailored design method was followed for the study timeline protocol (Dillman, 2000). Dillman (2000) stated that to increase the response rate, a detailed method should be followed that included but was not limited to; introduction emails, follow-up reminder emails and a "thank you" email. All emails for this study were sent out through the University of Tennessee Dean of Extension's office. The email consisted of an introduction of the study and a 24 hour follow-up email with a link to the web-based online survey. At the end

Table 1
Cronbach's Alpha Reliability Coefficient for the instrument (n=13).

Competence Area	Number of Items	Cronbach's Alpha
1. Knowledge Level	8	.782
2. Comfort Level	8	.728
3. Need for Formalized System	9	.819

of week one, an additional follow-up email which included a survey link were sent to all non-respondents. A “thank you” email was then sent after the close of the survey to all participants. A total of 91 individuals voluntarily completed this survey for a response rate of 61%. According to Babbie (2001) social science research had a wide range of acceptable response rates and it was added that a response rate of 50% was adequate for analysis and reporting with electronic self-administered surveys. An identical additional survey was conducted with Tennessee State University 4-H Extension Agents after the completion of the University of Tennessee Extension Agent survey. Dillman's tailored design was followed for this additional survey. There were 13 TSU Agents with 4-H job responsibility. A total of 7 participants voluntarily completed the survey for a response rate of 53%. This response rate was also deemed adequate for analysis and reporting as cited earlier with Babbie (2001) that social science research has wide range of acceptable response rates and that 50% response rate when using an electronic survey was adequate for analysis and reporting. In addition, Hamilton (2003) stated that email survey responses of 40% were average, 50% were good and 60% were very good. The data collected from both surveys were then combined for a response rate of 98 participants from 161 targeted individuals for a total survey response rate of 60%.

Instrumentation

A formal review of this study by the University of Tennessee Institutional Review Board (IRB) preceded the data collection. The method used for collecting data was a four part researcher-designed web-based questionnaire. The questionnaire format was self-designed using Survey Monkey web-based surveys. Part I, II, and III consisted of a self-developed five point Likert-Scale survey that was used to collect information on how respondents felt about the need for a formal volunteer management system, their knowledge level in managing 4-H volunteers, expertise of volunteer recruitment, training, recognition and evaluation and their perceptions of managing these volunteers. Part IV of the survey instrument consisted of demographic information on topics that included; gender, age, race/ethnicity, what region the respondent was employed in, the percentage of 4-H Youth Development job responsibility, and if they were ever employed in another state as a 4-H Youth Development Extension Agent.

Data Analysis

Research objective one was used to determine the demographics of the population being studied. Respondents were asked to answer various questions regarding their age, gender, race and number of years in Extension employment. Objective two was used to determine the knowledge level of Extension Agents of managing 4-H Volunteer Leaders. Objective three was used to find the perception Extension Agents had in working with and managing 4-H Volunteer Leaders. Objective four was used to determine the need for a formalized volunteer management system. Objectives two through four data were assigned a range from one to five, (1-Strongly Agree, 2-Agree, 3-N/A or Neutral, 4-Disagree, 5-Strongly Disagree). Data analysis was conducted using the University of Tennessee Statistical Package for the Social Sciences version

17.0 for Windows™. Miller (1998) stated that descriptive statistics were the best method for statistical analysis for exploring or describing data. To further accomplish this, percentages, frequencies and measures of central tendency were used to describe the respondent's feedback. Pearson product moment correlation coefficients were also performed to signify any correlation between demographics and survey data and crosstabulation was used to further help explain the data findings.

Chapter IV

Presentation and Discussion of Data

Objective 1. To determine demographic information of the Tennessee Extension Agents with 4-H job responsibility.

The first objective of the study was to describe the demographics of respondents. Information was reported regarding their age, race, gender, term of employment, region of state employed, percent of 4-H job responsibility and participation in volunteer organizations. A total of 98 out of 161 respondents completed the survey.

Descriptive analysis reported on items of gender for the sample populations were nearly equal, with 44 respondents being male and 54 being female. Less than half (41.9%) of the respondents were between 20-35 years. Almost one-fourth (24.5%) of respondents were between the ages of 46-55 years and about 20% were 36-45 years old. Less than fifteen percent (14.3%) of the age ranges were over 55 years old.

The majority of respondents reported to be White (94.9%), and the remainders of the respondents were Black or African American (5.1%). Respondents did not identify with any other race or ethnicity groups that were mentioned in the survey. The Extension tenure was reported with years of service. Less than 40% (39.8%) of the respondents have worked nine or less years; with the majority of the respondents indicating they had worked five or less years. Over one-third of the respondents (34.7%) indicated they had worked between 10-19 years as a 4-H Extension Agent. Finally, over one-fourth (25.5%) of respondents had tenure of over 20 years or more in the field of 4-H.

More than half (51%) of respondents had 100% 4-H job responsibility. Over one-fourth, (21.4%) of respondents reported to have 50%-99% 4-H job responsibility. The researcher also noted that less than thirty percent (27.5%) of the respondents indicated less than half (49%) of 4-H allotted work responsibility. The 3 regions of the state were nearly divided equally with 33.7% being from the Eastern Region (33 counties) and 36.7% of respondents answering from the Central Region (31 counties) and 39.6% of agents representing the Western Region (31 counties). Refer to Table 2.

More than half (53.1%) of agents had served Extension in another role other than 4-H Agent. Only 6.1% (n=6) had served as an Extension Agent in another state. Almost half of respondents had prior employee or volunteer management (42.9%) and 36.7% reported they belong to a volunteer organization. Nearly 90% of the respondents reported they volunteer for some type of organization. The reports for the data are listed in Table 2.

Objective Two. To determine the knowledge level of volunteer management of Tennessee Extension Agents with 4-H job responsibility.

Objective two determines the knowledge level of volunteer management practices among Extension Agents with 4-H job responsibility. Of the 98 respondents who answered the survey completely in regards to knowledge and experience of written volunteer job descriptions, supervision to volunteers, motivation, recognition and recruitment of volunteers. The knowledge level question scale score for all answers had an assigned possible range of one to five, with one as strongly agree to five as strongly disagrees. The data analysis reported frequencies, percent, mean, mode, standard deviation, and range.

The knowledge level for describing the role of 4-H Volunteer Leaders within Extension was reportedly high with 16.3% of respondents strongly agreeing and 70.4% agreeing that they

Table 2

Demographic Characteristics of Extension Agents with 4-H Responsibility

Gender (n=98)	n	%
Male	44	44.9
Female	54	55.1
Total	98	100
Age (n=98)		
20-24 Years	4	4.1
25-35 Years	37	37.8
36-45 Years	19	19.4
46-55 Years	24	24.5
Over 55 Years	14	14.3
Total	98	100
Race/Ethnicity (n=98)		
Black or African American	5	5.1
White	93	94.9
Total	98	100
Extension Tenure (n=98)		
Less than 5 Years	34	34.7
5-9 Years	5	5.1
10-19 Years	34	34.7
20-29 Years	17	17.3
Over 30 Years	8	8.2
Total	98	100
Percentage of 4-H Job Responsibility (n=98)		
Less than 25 %	12	12.2
25%-49 %	15	15.3
50%-74%	19	19.4
75%-99%	2	2.0
100%	50	51.0
Total	98	100

Table 2 Continued

Demographic Characteristics of Extension Agents with 4-H Responsibility

Region of the state served (n=98)	n	%
Eastern	33	33.7
Central	36	36.7
Western	29	29.6
Total	98	100
Served Extension in another role (n=98)		
Yes	52	53.1
No	46	46.9
Total	98	100
Served Extension in another state (n=98)		
Yes	6	6.1
No	92	93.9
Total	98	100
Prior employee/volunteer management experience (n=98)		
Yes	42	42.9
No	56	57.1
Total	98	100
Belong to a volunteer organization (n=98)		
Yes	36	36.7
No	62	63.3
Total	98	100
Volunteer for an organization (n=98)		
Yes	85	86.7
No	13	13.3
Total	98	100

can describe these roles. A less percentage of respondents (17.3%) strongly agree and (53.1%) agree that they can write 4-H Volunteer job descriptions. Over 95% of Extension Agents responded they can provide supervision to 4-H Volunteer Leaders. Providing motivation to these 4-H Volunteer Leaders decreased in proficiency as the previous knowledge areas with 14.3% strongly agreeing and 67.3% agreeing. A small increase showed that 30.6% strongly agreed and 54.1% of Extension Agents agreed that they often recognize 4-H Volunteer Leader accomplishments. Over three-fourths of respondents cumulatively agreed, 17.3% strongly agreed and 58.2% agreed, they can help 4-H Volunteer Leaders identify areas where change is needed. Over 70% of Extension Agents either strongly agreed or agreed they can assess the success of a 4-H Volunteer Leader program. Refer to table 9. The knowledge area that was reported to be lowest in proficiency was recruiting 4-H Volunteer Leaders effectively with only 8.2% strongly agreeing and 45.9% agreeing. Tables 3 through 10 further report the data. Appendix D shows measures of central tendency and further descriptive statistics for data analysis.

Pearson Product Moment Correlation Coefficients for Objective Two

Pearson product moment correlation coefficients (2-tailed) were used to determine between demographics and 4-H Volunteer Leader management knowledge levels of Extension employees. There were significant relationships between outside of Extension employee management and recruiting volunteers effectively, $r=.245$, $p<0.05$, and also outside of Extension employee management and motivating 4-H Volunteer Leaders, $r=.230$, $p<0.05$. Further significance is found between volunteering for an organization and recognizing 4-H Volunteer

Table 3

I can describe the role of 4-H Volunteer Leaders within UT Extension.

	n	%
Strongly Agree	16	16.3
Agree	69	70.4
N/A or Neutral	7	7.1
Disagree	6	6.1
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 4

I can write 4-H Volunteer Leader job descriptions.

	n	%
Strongly Agree	17	17.3
Agree	52	53.1
N/A or Neutral	20	20.4
Disagree	9	9.2
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 5

I can provide supervision to 4-H Volunteer Leaders.

	n	%
Strongly Agree	30	30.6
Agree	65	66.3
N/A or Neutral	3	3.1
Disagree	0	0
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 6

I can motivate 4-H Volunteer Leaders.

	n	%
Strongly Agree	14	14.3
Agree	66	67.3
N/A or Neutral	14	14.3
Disagree	4	4.1
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 7

I often recognize 4-H Volunteer Leader accomplishments.

	n	%
Strongly Agree	30	30.6
Agree	53	54.1
N/A or Neutral	8	8.2
Disagree	7	7.1
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 8

I can help 4-H Volunteer Leaders identify areas where change is needed.

	n	%
Strongly Agree	17	17.3
Agree	57	58.2
N/A or Neutral	19	19.4
Disagree	5	5.1
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 9

I can assess the success of a 4-H Volunteer Leader program.

	n	%
Strongly Agree	18	18.4
Agree	53	54.1
N/A or Neutral	19	19.4
Disagree	8	8.2
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 10

I can recruit 4-H Volunteer Leaders effectively.

	n	%
Strongly Agree	8	8.2
Agree	45	45.9
N/A or Neutral	24	24.5
Disagree	21	21.4
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Leader accomplishments, $r=.223$, $p<0.05$. Race/ethnicity and motivating 4-H Volunteer

Leaders showed a significance level of $r=.238$, $p<0.05$. Table 11 summarizes these findings.

Objective Three. To determine the perception of Extension Agents with 4-H responsibility in working with 4-H Volunteer Leaders.

Objective three represents the perceptions that Extension Agents have toward 4-H Volunteer Leaders carrying out 4-H programs, being welcome within the school system, effectively meeting after-school project groups, starting up new project groups, and contacting

Table 11

Pearson product moment correlation coefficient to determine the knowledge level of volunteer management of Tennessee Extension Agents with 4-H job responsibility.

	I can describe the role of 4-H V.L. within UT Extension.	I can write 4-H V.L. job descriptions.	I can provide supervision to 4-H V.L.	I can motivate 4-H V.L.	I often recognize 4-H V.L. accomplishments.	I can help 4-H V.L. identify areas where change is needed.	I can assess the success of a 4-H V.L. program.	I can recruit 4-H V.L. effectively.
Gender.	.129	.035	-.085	.049	.035	.093	.016	.046
	.206	.732	.404	.631	.729	.362	.877	.654
Age range.	-.142	-.152	-.122	-.074	.081	.013	.062	.027
	.162	.135	.233	.472	.426	.895	.545	.788
Race/ Ethnicity.	.077	-.052	.057	.238*	.034	.100	.049	.150
	.449	.614	.580	.018	.742	.326	.632	.140
Extension Tenure	-.020	-.178	-.075	.107	-.002	.091	.167	.031
	.848	.079	.461	.295	.981	.371	.099	.763
What percentage of your job is related to 4- H Youth Development? t?	.088	-.060	.018	-.022	-.131	.012	.009	.057
	.387	.554	.861	.832	.199	.910	.931	.577

Note: 4-H Volunteer Leader= 4-H V.L. , ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 11 Continued

Pearson product moment correlation coefficient to determine the knowledge level of volunteer management of Tennessee Extension Agents with 4-H job responsibility.

	I can describe the role of 4-H V.L. within UT Ext.	I can write 4-H V.L. job descriptions.	I can provide supervision to 4-H V.L.	I can motivate 4-H V.L.	I often recognize 4-H V.L. accomplishments.	I can help 4-H V.L. identify areas where change is needed.	I can assess the success of a 4-H V.L. program.	I can recruit 4-H V.L. effectively.
Have you ever served UT Extension in another role other than a 4-H Youth Development Extension Agent?	.095	.167	-.078	-.071	-.037	.008	-.052	.019
	.352	.101	.445	.488	.721	.934	.613	.851
Have you ever served as an Extension Agent in another state?	.017	.077	.067	-.054	-.081	-.127	-.174	-.072
	.864	.452	.512	.598	.426	.213	.087	.480
Outside of Extension job experience?	-.112	.015	.112	.031	.027	.099	.106	.026
	.273	.887	.271	.759	.795	.332	.300	.802
Do you belong to any organized volunteer association?	-.051	.049	.138	.230*	-.036	.170	.083	.245*
	.617	.630	.174	.023	.724	.095	.419	.015
Do you volunteer for any organization?	.187	.119	.086	.094	.131	.210*	.135	.169
	.066	.242	.398	.360	.198	.038	.184	.095

Note: 4-H Volunteer Leader= 4-H V.L. , ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

key community leaders. Objective three also helped to determine if Extension Agents perceived themselves to understand risk management of 4-H Volunteer Leaders. The knowledge level question scale score for all answers had an assigned possible range of one to five, from strongly agree to strongly disagree. Data analysis as descriptive statistics in regards to frequencies, percent, mean, median, mode, standard deviation and range explain the results collected.

Over three-fourths (79.6%) of Extension Agents either agreed or strongly agreed that 4-H Volunteer Leaders are capable of carrying out 4-H programs. This percentage greatly decreased to 10.2% strongly agreed and 23.5% agreed that 4-H Volunteer Leaders are welcome within the school system. However, 88.8% of Extension Agents agreed or strongly agreed that 4-H Volunteer Leaders can effectively meet with an after-school project group. Nearly three-fourths of the agents strongly agreed (15.3%) or agreed (58.2%) they feel comfortable with 4-H Volunteer Leaders starting up a new county project group. Only half of the respondents, 50%, replied that they either agreed or strongly agreed they feel comfortable with 4-H Volunteer Leaders contacting key leaders within the community about 4-H programming. These percentages increased to 17.3% strongly agree and 53.1% agree they can deny a 4-H Volunteer Leader for a position. Nearly the same percentage, 15.3 % strongly agree and 54.1% agree, of Extension Agents can remove a 4-H Volunteer Leader from a position. Overall, 64.3% of respondents either agreed or strongly agreed they understand risk management of 4-H Volunteer Leaders. Tables 12 through 19 represent the data collected. Appendix D shows measures of central tendency and further descriptive statistics for data analysis.

Table 12

4-H Volunteer Leaders are capable of carrying out 4-H programs.

	n	%
Strongly Agree	18	18.4
Agree	60	61.2
N/A or Neutral	17	17.3
Disagree	3	3.1
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 13

4-H Volunteer Leaders are welcome within the school system.

	n	%
Strongly Agree	10	10.2
Agree	23	23.5
N/A or Neutral	32	32.7
Disagree	26	26.5
Strongly Disagree	7	7.1
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 14

4-H Volunteer Leaders can effectively meet with an after-school project group.

	n	%
Strongly Agree	27	27.6
Agree	60	61.2
N/A or Neutral	10	10.2
Disagree	1	1.0
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 15

I feel comfortable with 4-H Volunteer Leaders starting up a new county 4-H project group.

	n	%
Strongly Agree	15	15.3
Agree	57	58.2
N/A or Neutral	18	18.4
Disagree	8	8.2
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 16

I feel comfortable with 4-H Volunteer Leaders contacting key leaders within the community about 4-H programming.

	n	%
Strongly Agree	10	10.2
Agree	39	39.8
N/A or Neutral	26	26.5
Disagree	23	23.5
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 17

I can deny a 4-H Volunteer Leader for a position.

	n	%
Strongly Agree	17	17.3
Agree	52	53.1
N/A or Neutral	24	24.5
Disagree	5	5.1
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 18

I can remove a 4-H Volunteer Leader from a position.

	n	%
Strongly Agree	15	15.3
Agree	53	54.1
N/A or Neutral	24	24.5
Disagree	5	5.1
Strongly Disagree	1	1.0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 19

I understand risk management of 4-H Volunteer Leaders.

	n	%
Strongly Agree	9	9.2
Agree	54	55.1
N/A or Neutral	17	17.3
Disagree	15	15.3
Strongly Disagree	3	3.1
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Pearson Product Moment Correlation Coefficients for Objective Three

Pearson product moment correlation coefficients (2-tailed) were also determined between demographics and the perceptions of Extension Agents managing 4-H Volunteer Leaders. There were significant relationships between race/ethnicity and 4-H Volunteer Leaders being capable of carrying out 4-H programs, $r=.208$, $p<0.05$. Additional significances were found between race/ethnicity and 4-H Volunteers Leaders being capable of effectively meeting after-school

project groups, $r=.265$, $p<0.05$, and between race/ethnicity and the comfort level of 4-H Volunteer Leaders contacting key community leaders, $r=.265$, $p<0.05$. There were also significances between gender and removing a 4-H Volunteer Leader from a position, $r=.215$, $p<0.05$. Further significances were found between Extension tenure and 4-H Volunteer Leaders being welcome within the school system, $r=.219$, $p<0.05$ and Extension tenure and understanding risk management of 4-H Volunteer Leaders, $r=-.228$, $p<0.05$. Other significances included region of the state employed and 4-H Volunteer Leaders being capable of carrying out 4-H programs, $r=.227$, $p<0.05$ and prior volunteer/employee management experience and removing a volunteer from a position, $r=.285$, $p<0.01$. Additionally, between belonging to an organized volunteer leader organization and being comfortable with 4-H Volunteers contacting key leaders within the community $r=-.209$, $p<0.05$. Table 20 summarizes the findings for Extension Agents (n=98).

Objective Four. To determine the need for an expanded formalized 4-H Volunteer Leader management system.

Objective four explored the need for a formalized 4-H Volunteer Leader management system. Extension Agents were surveyed on questions about specialized trainings for 4-H Volunteer Leaders and about the need for written job descriptions for volunteers. Objective four survey questions also explored the need for a 4-H Volunteer Leader handbook, 4-H Agent trainings in regards to volunteers, the need for web-based volunteer management materials and the need for an expanded formalized 4-H Volunteer Leader management system.

Over three fourths of the respondents strongly agreed (15.3%) or agreed (70.4%) that 4-H Volunteer Leaders need specialized training for the position. Only slightly smaller percentages, 21.4% strongly agree and 48.0% agree, that 4-H Volunteer Leaders need written job

Table 20

Pearson product moment correlation coefficient to determine the perception of Extension Agents with 4-H responsibility in working with 4-H Volunteer Leaders.

	4-H V.L. are capable of carrying out 4-H program s.	4-H V.L. are welcom e within the school system.	4-H V.L. can effectivel y meet with an after- school project group.	I feel comfortabl e with 4-H V.L. starting up a new county 4- H project group.	I feel comfortable with 4-H V.L. contacting key leaders within the community about 4-H programmin g.	I can deny a 4-H V.L. for a positio n.	I can remove a 4-H V.L. from a positio n.	I understand risk manageme nt of 4-H V.L.
Gender.	-.230*	-.025	-.122	-.194	.147	.044	.176	.045
	.022	.805	.232	.056	.148	.670	.083	.661
Age range.	.021	.074	.015	.185	.014	-.082	-.061	-.204*
	.838	.469	.884	.069	.887	.421	.551	.044
Race/ Ethnicity.	.219*	.248*	.312**	.057	.252*	.052	-.166	.116
	.031	.014	.002	.578	.012	.609	.102	.256
Extension Tenure	-.033	.223*	.096	.085	.011	.019	-.019	-.174
	.748	.027	.347	.406	.918	.850	.850	.087
What percentage of your job is related to 4- H Youth Development ?	.008	.129	.028	-.121	.008	.001	.049	.146
	.940	.205	.782	.235	.937	.995	.630	.152
Which region of the state do you serve?	.227*	.093	-.033	-.020	-.006	-.005	.046	.039
	.025	.364	.747	.846	.951	.960	.650	.703

Note: 4-H Volunteer Leader= 4-H V.L. , ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 20 Continued

Pearson product moment correlation coefficient to determine the perception of Extension Agents with 4-H responsibility in working with 4-H Volunteer Leaders.

	4-H V.L. are capable of carrying out 4-H program s.	4-H V.L. are welcom e within the school system.	4-H V.L. can effectivel y meet with an after- school project group.	I feel comfortabl e with 4-H V.L. starting up a new county 4- H project group.	I feel comfortable with 4-H V.L. contacting key leaders within the community about 4-H programmin g.	I can deny a 4-H V.L. for a positio n.	I can remove a 4-H V.L. from a positio n.	I understand risk manageme nt of 4-H V.L.
Have you ever served UT	-.040	-.011	.034	-.075	.019	.027	-.085	-.065
Extension in another role other than a 4-H Youth Development Extension Agent?	.697	.914	.741	.460	.850	.791	.406	.524
Have you ever served as an Extension Agent in another state?	.142	-.007	.006	.116	-.188	.002	.071	.083
	.163	.944	.957	.254	.064	.982	.484	.415
Outside of Extension job experience?	-.085	.259*	.019	-.127	.012	.115	.268**	.003
	.404	.010	.855	.214	.904	.260	.008	.976
Do you belong to any organized volunteer association?	-.036	-.021	.050	.026	-.205*	.007	.160	.094
	.727	.835	.624	.798	.043	.948	.114	.357
Do you volunteer for any organization ?	.058	-.154	-.096	.094	.025	-.010	-.034	-.070
	.569	.129	.346	.356	.811	.922	.736	.494

Note: 4-H Volunteer Leader= 4-H V.L. , ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

descriptions. Most respondents (51%) strongly agree and (40.8%) agree that 4-H Volunteer Leaders need a recognition program. This was the highest percentage of positive responses for survey questions in objective four. A great percentage (26.5%) strongly agree and (50%) agree of agents responded that 4-H Agents need a 4-H Volunteer Leader management handbook. A higher cumulative percentage, (22.4%) strongly agree and (62.2%) agree, that 4-H Volunteer Leaders need an orientation training program. Nearly the same response rate was true, 26.5% strongly agree and 55.1% agree, that 4-H Agents need 4-H Volunteer Leader management training and nearly 90% of agents, (29.6%, n=29) strongly agree and (60.2%, n=59) agree, that 4-H Agents need readily available 4-H Volunteer Leader management materials. A high percentage also strongly agreed (28.6%) and agreed (54.1%) that 4-H Volunteer Leaders need access to the 4-H Volunteer Leader management materials. Also, 17.3% strongly agreed and 49% agreed, for a cumulative average of 66.3%, that 4-H Agents need a comprehensive 4-H Volunteer Leader management system. Tables 21 through 29 further describe the data. Appendix D shows measures of central tendency and further descriptive statistics for data analysis.

Pearson Product Moment Correlation Coefficients for Objective Four

Pearson product moment correlation coefficients (2-tailed) were also determined between demographics and the need for an expanded formalized volunteer management system. There were significant relationships between gender and 4-H Agents need readily available 4-H Volunteer Leader management materials, $r = -.270$ $p < 0.01$. There was also significance between percentage of 4-H job responsibility and 4-H Volunteer Leaders needing a recognition program, $r = -.201$, $p < 0.05$. Region of the state employed had three response rate areas of significance.

Table 21

4-H Volunteer Leaders need specialized training for the position.

	n	%
Strongly Agree	15	15.3
Agree	69	70.4
N/A or Neutral	12	12.2
Disagree	2	2.0
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 22

4-H Volunteer Leaders need written job descriptions.

	n	%
Strongly Agree	21	21.4
Agree	47	48.0
N/A or Neutral	15	15.3
Disagree	14	14.3
Strongly Disagree	1	1.0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 23

4-H Volunteer Leaders need an orientation program.

	n	%
Strongly Agree	22	22.4
Agree	61	62.2
N/A or Neutral	13	13.3
Disagree	2	2.0
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 24

4-H Volunteer Leaders need a recognition program

	n	%
Strongly Agree	50	51
Agree	40	40.8
N/A or Neutral	8	8.2
Disagree	0	0
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 25

4-H Agents need a 4-H Volunteer Leader management handbook.

	n	%
Strongly Agree	49	50
N/A or Neutral	16	16.3
Disagree	7	7.1
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 26

4-H Agents need 4-H Volunteer Leader management training.

	n	%
Strongly Agree	26	26.5
Agree	54	55.1
N/A or Neutral	13	13.3
Disagree	5	5.1
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 27

4-H Agents need readily available 4-H Volunteer Leader management materials.

	n	%
Strongly Agree	29	29.6
Agree	59	60.2
N/A or Neutral	8	8.2
Disagree	2	2.0
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 28

4-H Volunteer Leaders need access to 4-H Volunteer Leader management materials.

	n	%
Strongly Agree	28	28.6
Agree	53	54.1
N/A or Neutral	12	12.2
Disagree	5	5.1
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

Table 29

4-H Agents need a comprehensive 4-H Volunteer Leader management system.

	n	%
Strongly Agree	17	17.3
Agree	48	49.0
N/A or Neutral	22	22.4
Disagree	11	11.2
Strongly Disagree	0	0
Total	98	100

Note. The values for the scales are as follows: 1- Strongly Agree, 2- Agree, 3-N/A or Neutral, 4- Disagree, 5- Strongly Disagree

These were; region of the state employed and 4-H Agents need a comprehensive 4-H Volunteer Leader management system, $r=.294, p<0.01$, region of the state employed and 4-H Agents need a 4-H Volunteer Leader management handbook, $r=-.231, p<0.05$ and region of the state employed and 4-H Volunteer Leaders need an orientation program, $r=.366, p<0.01$. Another area with many significant correlations was that of race/ethnicity. Race and ethnicity had the following significance; race/ethnicity and 4-H Volunteer Leaders need written job descriptions, $r=.202, p<0.05$, race/ethnicity and 4-H Volunteer Leaders need orientation training, $r=.263, p<0.01$, race/ethnicity and 4-H Volunteer Leaders need a recognition program, $r=.207, p<0.05$, race/ethnicity and 4-H Agents need readily available 4-H Volunteer Leader management materials, $r=.222, p<0.05$, and race/ethnicity and 4-H Volunteer Leaders need access to 4-H Volunteer Leader management materials, $r=.220, p<0.05$. There were also significance found between Extension tenure and 4-H Agents need a comprehensive 4-H Volunteer Leader management system, $r=.201, p<0.05$. And finally, there were noted significance between prior employee/volunteer management experience and 4-H Volunteer Leaders need an orientation program, $r=-.223, p<0.05$. Table 30 summarizes these findings.

Table 30

Pearson product moment correlation coefficient to determine the need for an expanded formalized 4-H Volunteer Leader management system.

	4-H V.L. need speciali zed training for the positio n.	4-H V.L. need written job descripti ons.	4-H V.L. need an orienta tion trainin g progra m.	4-H V.L. need a recogni tion progra m.	4-H Agents need a 4-H V.L. manage ment handboo k.	4-H Agents need 4- H V.L. manage ment training.	4-H Agents need readily available 4-H V.L. manage ment material s.	4-H Volunte er Leaders need access to 4-H V.L. manage ment material s.	4-H Agents need a comprehe nsive 4-H V.L. managem ent system.
Gender.	.118	.026	.023	-.060	-.102	-.089	-.270**	-.150	-.091
	.246	.803	.819	.560	.317	.386	.007	.141	.375
Age range.	-.016	.082	-.102	.179	.007	-.088	-.051	-.063	.101
	.878	.420	.320	.079	.942	.388	.620	.540	.324
Race/ Ethnicity.	.082	.202*	.263**	.207*	.176	.110	.222*	.220*	.178
	.425	.046	.009	.040	.083	.279	.028	.030	.079
Extension Tenure	-.046	.119	.011	.154	.115	-.032	.106	.114	.201*
	.652	.245	.913	.129	.261	.755	.299	.266	.047
What percentag e of your job is related to 4-H Youth Develop ment?	.106	-.083	-.059	-.201*	-.132	-.001	-.104	-.027	-.056
	.301	.417	.563	.048	.194	.995	.310	.791	.581
Which region of the state do you serve?	.130	.105	.366**	.167	.231*	.048	.182	.095	.294**
	.202	.304	.000	.101	.022	.641	.072	.353	.003

Note: 4-H Volunteer Leader= 4-H V.L. , ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 30 Continued

Pearson product moment correlation coefficient to determine the need for an expanded formalized 4-H Volunteer Leader management system.

	4-H V.L. need specializ ed training for the position.	4-H V.L. need written job descriptio ns.	4-H V.L. need an orientati on training progra m.	4-H V.L. need a recogniti on program	4-H Agents need a 4- H V.L. managem ent handbook	4-H Agents need 4-H V.L. managem ent training.	4-H Agents need readily available 4-H V.L. managem ent materials.	4-H Volunteer Leaders need access to 4-H V.L.manage ment materials.
Have you ever served UT Extension in another role other than a 4-H Youth Developm ent Extension Agent?	.052	-.036	-.020	-.137	.003	.116	.031	.021
	.609	.724	.843	.178	.977	.254	.765	.834
Have you ever served as an Extension Agent in another state?	.004	.066	.045	-.038	.164	.045	.062	.089
	.966	.517	.662	.710	.107	.661	.542	.383
Outside of Extension job experienc e?	-.123	-.069	-.223*	-.097	-.080	.046	-.103	-.147
	.227	.500	.027	.343	.432	.656	.311	.148
Do you belong to any organized volunteer associatio n	.048	-.125	.037	-.080	.012	.106	.057	.076
	.636	.219	.716	.431	.908	.297	.579	.458
Do you volunteer for any organizati on?	-.158	-.102	-.106	-.067	-.055	.054	.012	.031
	.121	.320	.297	.510	.594	.596	.909	.764

Note: 4-H Volunteer Leader= 4-H V.L. , ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Chapter V

Results and Conclusions

As the Cooperative Extension Service and UT & TSU Extension continue to serve its audiences on a vast and current pace, volunteers are and continue to be a very important resource to the organization. With a growing population served and the need for expanded project areas, 4-H Volunteers are in an ever growing demand. As the need for volunteers increase, volunteer management systems that help recruit, train, recognize, motivate, retain and give Extension Agents the resources they need are in vital demand. Without these volunteers, the outreach of Extension would not be possible.

The following conclusions were drawn from the results and findings of this state-wide needs assessment of Tennessee Extension 4-H Youth Development Agents. This was a survey of 98 convenience sample respondents of University of Tennessee and Tennessee State University Extension Agents with 4-H job responsibility. Descriptive statistics were used to summarize findings. Also, significant correlations were determined by using Pearson product moment correlation coefficients and these significances were further explained by using crosstabulation analysis.

Summary of Findings

Currently Extension in Tennessee has 180 Agents, both UT and TSU combined, that have a percentage of 4-H job responsibility. These percentages can be divided into nineteen different FTE (full time equivalencies) ranging from 5% to 100%. After completion of the pilot study, a total of 161 participants were targeted for this study, with a response from 98 Agents.

This resulted in a response rate of 60%. From these responses, the data includes that 55% of Extension Agents with a percentage of 4-H job responsibility are females and 45% are males. The Agents range in ages from 20 to over 55 with the greatest number of employees being in the age range between 25-35 years (37.8%). The majority of agents are White (95%), with 5% being Black or African American. 34.7% of Agents had extension tenures of both less than 5 years and 10-19 years. The greatest number of Extension Agents completing this survey (51%, n=50) had 100% 4-H job responsibility and the regions were split with 33.7% being from the Eastern, 36.7% from the Central and 30% being from the Western region of the state. Over half of respondents said they had served UT Extension in another role other than 4-H Youth Development and 6.1% had served as an Extension Agent in another state. Over forty percent of respondents had prior experience in employee management and 36.7% of respondents said they belonged to an organized volunteer association. Less than ninety percent of respondents surveyed said they do volunteer for some type of organization.

Objective two results were gathered from information collected from Tennessee Extension Agents about their knowledge of volunteer management. A cumulative 70.4% of employees reported that they agreed or strongly agreed that they were capable of writing 4-H Volunteer Leader job descriptions. An even greater cumulative percentage, 96.9%, of Agents agreed or strongly agreed that they can provide supervision to 4-H Volunteers. The numbers slightly decreased to 81.6 % agreed or strongly agreed to being able to motivate volunteers. Although lower, this number is still significant of the Agent's volunteer management knowledge level. Recognition of 4-H Volunteers was found to be of great importance with a cumulative 84.7% of Extension Agents strongly agreeing or agreeing that they often recognize 4-H Leader

accomplishments. The numbers decreased with three-fourths of Extension Agents cumulatively strongly agree or agree they can help 4-H Volunteer Leaders identify areas where change is needed and a little over half agreed or strongly agreed that they can recruit 4-H Volunteer Leaders effectively. Pearson product moment correlation coefficients showed a significance between effectively recruiting 4-H Volunteer Leaders and prior employee management experience, $r = .245, p < 0.05$. Also, there were significances found between motivating 4-H Volunteer Leaders and prior employee management, $r = .230, p < 0.05$. In both instances it was found that the more experience in management an Extension Agent had, the more knowledge they possessed about motivating and recruiting 4-H Volunteer Leaders. These findings were significant in that Extension Agents need further training in areas of volunteer management, especially those agents who do not have management backgrounds. There was also a significance found between Agents volunteering for an organization and often recognizing 4-H Volunteer Leader accomplishments, $r = .223, p < 0.05$. This significance showed that if a respondent spent their time volunteering for an organization they see both the benefits and rewards of recognizing volunteer accomplishments. And finally there were significant relationship correlation between the knowledge area of motivating 4-H Volunteer Leaders and race/ethnicity, $r = .238, p < 0.05$. It was found throughout this study, that African Americans showed a high competency in several areas and one of these areas was motivating volunteer leaders.

Objective three evaluated the Extension Agent's perception of managing 4-H Volunteer Leaders and the perception that Extension Agent's have in 4-H Volunteer Leaders carrying out youth programs. It was found that nearly eighty percent, cumulatively, of Extension Agents

thought that 4-H Volunteer Leaders are capable of carrying out 4-H programs. A mere 33.7% either agreed or strongly agreed that 4-H Leaders are welcome within the school system. Pearson product moment correlation coefficients also showed a significance, $r=.223$, $p<0.05$, of Extension tenure and 4-H Volunteer Leaders being welcome within the school system. It was found that a greater number of Extension Agents with 10-19 years of experience either disagreed or strongly disagreed to 4-H Volunteer Leaders being welcome within the school system. The other greatest tenure percentage of agents disagreeing or strongly disagreeing to this question was that of less than 5 years. In addition, prior management of employees correlated with leaders being welcome within the school system held a significance of $r= .259$, $p<0.05$. It was found that the more experience an Agent had the more they perceived leaders to be welcome within the school system. Also, race/ethnicity had a positive correlation, $r= .248$, $p<0.05$, with 4-H Volunteer Leaders being welcome within the school system. It is understood that not every county in the state has school systems that allow 4-H Volunteer Leaders to conduct in-school clubs and for this reason the results pertaining to this survey component may be viewed as biased or skewed.

The trend shifted to 88.8% of Extension Agent's either agreed or strongly agreed that 4-H Volunteer Leaders can effectively meet with an after-school project group. Nationally, after-school programs are what most 4-H programs are comprised of (Russell, 2001) and Tennessee Extension Agents seem no different in their comfort level of having 4-H Leaders meet these after-school project groups. Nearly three-fourths of Agents either agreed or strongly agreed that they are comfortable with 4-H Volunteer Leaders starting up a new county 4-H project group. This number significantly decreased to 50% of Extension Agents agreed or strongly agreed that

they are comfortable with 4-H Leaders contacting key leaders within the community about 4-H programming. Pearson's indicate a negative correlation, $r = -.205$, $p < 0.05$, of agents belonging to a volunteer organization and the perception of 4-H Volunteer Leaders contacting key community leaders. Crosstabulations further explained that if an agent does not belong to a volunteer organization then they agree to be comfortable with 4-H Volunteer Leaders contacting key community leaders. It also must be noted that a small percentage, 36.7%, of agents belonged to a volunteer organization.

A greater percentage, 64.3%, of Extension Agents cumulatively agreed or strongly agreed that they understand risk management of 4-H Volunteers. Pearson's found a significance between age range and understanding risk management of 4-H Volunteer leaders, $r = -.204$, $p < 0.05$. Crosstabulation showed that agents who are 25-35 years, the greatest number of agents in an age range, more likely disagreed in understanding risk management of volunteers. This signifies that there is a need for more 4-H Volunteer Leader risk management information and training for Extension Agents early within their careers or as included within a formalized volunteer management system. A good percentage, 69.4%, of agents agreed or strongly agreed they can remove a 4-H Volunteer Leader from a position and Pearson's showed a significant correlation between prior employee/volunteer management experience and removing leaders from a position, $r = .268$, $p < 0.01$. This correlation signified that prior experience increases perceptions of managing volunteers and further warrants the need for 4-H Volunteer Leader management materials.

Other Pearson product moment correlation coefficients that were found to be significant were between race/ethnicity and 4-H Volunteer Leaders perceived being capable of carrying out

4-H programs, $r=.219$, $p<0.05$, and between race/ethnicity and 4-H Volunteer Leaders effectively meeting after-school project groups, $r=.312$, $p<0.05$, and finally between race/ethnicity and the level of comfort of having 4-H Volunteer Leaders contact key leaders within the community, $r=.252$, $p<0.05$. Through crosstabulation it was discovered the African American/Black population, 5% of the respondents, either agreed or strongly agreed to these perceptions of managing 4-H Volunteer Leaders. Another significant Pearson correlation was found between gender and 4-H Volunteer Leaders are capable of carrying out programs, $r= -.230$, $p<0.05$. By further reviewing the data it was found that more females strongly agreed ($n=16$) when compared to males ($n=2$) that leaders are capable of carrying out programs. A final significance was between region of the state worked and 4-H Volunteer Leaders being capable of carrying out programs, $r = .227$, $p<0.05$. This should be further studied to see if there are regional differences on how 4-H Agents are trained with the use of 4-H Volunteer Leaders.

Objective four explored the need for a formalized 4-H Volunteer Leader Management system. The formalized management system could include, but not limited to, training materials for all 4-H Youth Development Agents and 4-H Youth Development Volunteers, web-based information and a complete volunteer training manual to include topics such as recruitment, training, motivation, risk management and retention of 4-H Volunteers available to agents and volunteer leaders. Through the other objective findings, it is found that there is a need for risk management training, and that some county school systems do not welcome volunteers. Also, prior employee management experience is significant in managing 4-H Volunteers. Objective four findings were as follows. Cumulatively, 85.7% of Extension Agents either agreed or strongly agreed that 4-H Volunteer Leaders need specialized training for the position. Over

three-fourths of these Agents agreed or strongly agreed that 4-H Agents need a 4-H Volunteer Leader management handbook. A great percentage, 81.6%, either agreed or strongly agreed that 4-H Agents need 4-H Volunteer Leader management training. Almost 90% of respondents cumulatively agree or strongly agree that 4-H Agents need readily available 4-H Volunteer Leader management materials. This data concludes that there is a strong need for readily available management materials. Some states, including Florida, Kentucky, Michigan, Ohio, and Louisiana within the Cooperative Extension Service have implemented formalized volunteer management systems for their agents and 4-H Volunteer Leaders. These states have also made these management materials readily available (Culp, Deppe, Castillo & Wells, 1998). In addition, 82.7 % of agents cumulatively agreed that 4-H Volunteer Leaders need access to 4-H Volunteer Leader management materials. This supports a need for web-based, easy accessible materials. Still a strong overall percentage, 66.3% of Extension Agents agreed or strongly agreed that 4-H Agents need a comprehensive 4-H Volunteer Leader management system. This percentage of agents further supports the need for a formalized volunteer management system within the University of Tennessee/Tennessee State University Extension.

Pearson product moment correlation coefficients found significance between percentage of 4-H job responsibility and 4-H Volunteer Leaders need a recognition program, $r = -.201$, $p < 0.05$. Crosstabulation was calculated to further describe this correlation and it was found that 90 agents, (91%) either strongly agreed or agreed that 4-H Volunteer Leaders need a recognition program. The negative correlation comes from the positive answers which signifies that all agents either strongly agreed, agreed or were neutral to the survey response and no agents responded to the strongly disagree or disagree category, thus resulting in a negative Pearson's

correlation coefficient. Figure I show the crosstabulation for these survey responses. Other correlations found were between gender and 4-H Agents needing readily available 4-H Volunteer Leader management materials, $r=-.270$, $p<0.01$. It was found that male responses did not show as great of a need for readily available materials with 84% agreeing or strongly agreeing and 2 participants disagreeing. Over ninety percent, (94%), of females responded that 4-H Agents need readily available management materials. From these findings it is recommended that research regarding gender and types of management materials be further explored to explain these significances and to help develop a user friendly formalized 4-H Volunteer management system.

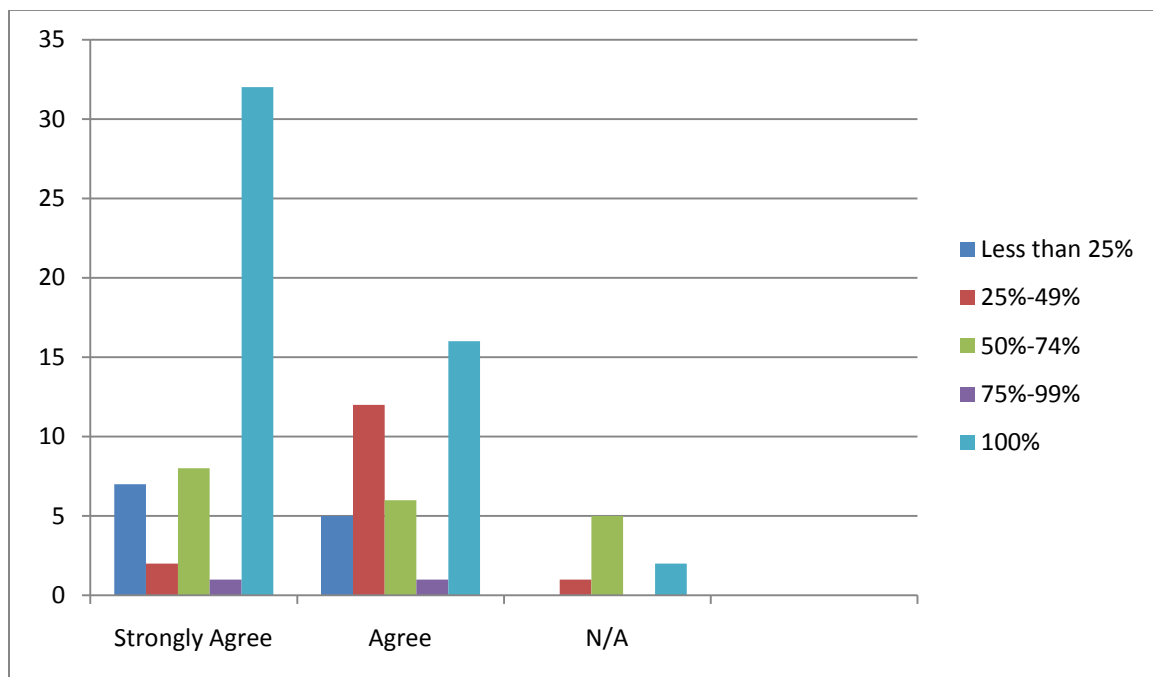


Figure I. *Percentage of 4-H job responsibility and 4-H Volunteer Leaders need a recognition program.*

There was a significance found between prior employee/volunteer management experience and 4-H Volunteer Leaders need an orientation training program, $r = -.223$, $p < 0.05$. Extension Agents with prior employee/volunteer management had less responses agreeing or strongly agreeing that 4-H Volunteer Leaders need an orientation program, with 2 agents disagreeing to this question. Possibly these agents felt they had enough experience to manage 4-H Volunteers without an orientation program. Another area of significance was that of Extension tenure and 4-H Agents need a comprehensive 4-H Volunteer Leader management system, $r = .201$, $p < 0.05$. It was found that the less Extension tenure an agent had the more they felt the need for a comprehensive 4-H Volunteer Leader management system. This finding further supports the need for a formalized 4-H Volunteer Leader management system to provide support to all agents and 4-H Volunteer Leaders within the program.

Other significant correlations included: race/ethnicity and the need for 4-H Volunteer Leader written job descriptions, $r = .202$, $p < 0.05$; race/ethnicity and the need for 4-H Volunteer Leader orientation training, $r = .263$, $p < 0.05$; race/ethnicity and 4-H Volunteer Leaders need a recognition program, $r = .207$, $p < 0.05$; race/ethnicity and 4-H Agents need readily available materials, $r = .222$, $p < 0.05$; and race/ethnicity and 4-H Volunteer Leaders need access to 4-H Volunteer Leader management materials. $r = .220$, $p < 0.05$. As found with earlier objectives, African Americans showed a high competency in several areas and agreed or strongly agreed to the need for management materials for both agents and volunteers. Another demographic that had several significances was that of region served and: 4-H Volunteer Leaders need an orientation program, $r = .366$, $p < 0.01$; 4-H Agents need a 4-H Volunteer Leader management handbook, $r = .231$, $p < 0.05$; and 4-H Agents need a comprehensive 4-H Volunteer Leader

management system, $r = .294$, $p < 0.01$. In addition to findings about regional significances from objective three, this also should be studied further to find if there are regional differences on how 4-H Agents are trained with the use of 4-H Volunteer Leaders.

Conclusions

It is found that after completion of this state-wide needs assessment, Extension Agents that have 4-H job responsibility need a formalized volunteer system. These Agents have a high knowledge level and high perception level in working with 4-H Volunteer Leaders, but have emphasized a need for readily available volunteer management materials. This need has been expressed that materials should be readily available to both agents and volunteers. Extension Agents have also agreed on the need for a formalized 4-H Volunteer Leader management system. Prior employee/volunteer management, age and Extension tenure show increases in risk management understanding, motivation and recruiting knowledge and the need for a formalized 4-H Volunteer Leader management system. In conclusion the findings from this study indicate Tennessee Extension has a need for a formalized volunteer management system that would encompass all aspects of volunteer recruitment, motivation, recognition, retention and overall management of these vital volunteers of our organization.

Recommendations and Limitations

This study was conducted as a needs assessment for a formalized 4-H Volunteer Leader management system within the University of Tennessee and Tennessee State University Extension. This study was used to collect data from Extension Agents with 4-H job responsibility regarding their knowledge and perceptions in managing volunteers and also to define the need for a formalized volunteer management system. It is recommended that further

research be conducted to determine the need for a mentoring system for agents who manage volunteers. The researcher suggests that an informational needs assessment be conducted with 4-H Volunteer Leaders to better design a useful, user friendly volunteer management system. Recommendations for further studies are also to find any significance between retention of Extension Agents and the retention of volunteers and available volunteer management materials.

List of References

References

- Babbie, E. (2001). Self-administered questionnaires. *In the practice of social research*. (p.253-257). Belmont, CA: Wadsworth.
- Boone, E. J., Safrit, R.D. & Jones, J. (2002). *Developing programs in adult education* (2nd ed.). Prospect Heights, IL: Waveland Press, Inc.
- Bourque, L. B. & Fielder, E.P. (1995). *How to conduct self-administered and mail surveys*. Sage Productions, Inc.
- Boyce, M. V. (1971). *A systematic approach to leadership development*. Washington, D.C.: USDA Extension Service (ERIC Document Reproduction Service No. ED 065-763).
- Boyd, B. L. (2003). Identifying competencies for volunteer administrators for the coming decade: A National Delphi Study. *Journal of Agricultural Education*. 44 (4). Retrieved April 8, 2009 from <http://pubs.aged.tamu.edu/jae/pdf/vol44/44-04-47.pdf>
- Cochran, W.G. (1977). *Sampling techniques*. (pp.72-76). (3rd Ed.). New York: Wiley
- Culp, III, K. (1999). Ohio State University Fact Sheet: *Types of volunteers*. Factsheet. Retrieved January 3, 2005 from http://ces.ca.uky.edu/4hvolunteer/roles_of_4.htm.
- Culp, III, K., Deppe, C. A., Castillo, J. X. & Wells, B. J. (1998). The GEMS model of volunteer leadership administration. *Journal of Volunteer Administration*, 16 (4), 36-41.
- Culp, III, K. & Kohlhagen, B. S. (2004). Kentucky 4-H Agent's perceptions of their levels of competency and frequency of use of volunteer administration function. *Journal of Agricultural Education*. 45 (9). Retrieved April 8, 2009 from <http://pubs.aged.tamu.edu/jae/pdf/vol45/45-02-47.pdf>
- Dillman, D. A. (1978). *Mail and telephone surveys: the total design method*. New York: John Wiley & Sons.
- Dillman, D. A. (2000). *Mail and internet surveys: the tailored design method*. New York: John Wiley & Sons.
- Ellis, S. J. (2002). *The volunteer recruitment book*. (p. 11-16). (3rd ed.). Philadelphia, PA: Energize, Inc.
- Enfield, R. P. (2001). Connections between 4-H and John Dewey's Philosophy of Education. *FOCUS*. Winter (11). Retrieved March 5, 2005 from <http://fourcyd.ucdavis.edu>

- Fisher, J. C., & Cole, K. M. (1993). *Leadership and management of volunteer programs*. San Francisco, CA: Jossey-Bass Publishers.
- Gall, M. D., Borg, W. R. & Gall, J. P. (1996). *Educational Research: An Introduction* (6th ed.). USA White Plains, New York: Longman Publishers.
- Gillham, B. (2000). *Developing a Questionnaire*. New York. Continuum Publishing.
- Grossman, J. B. & Furano, K. (2002). Making the most of volunteers. *Public/Private Ventures*. Retrieved December 31, 2008 from <http://www.ppv.org>.
- Hager, M. A. & Brudney J. L. (2004). Volunteer management practices and retention of volunteers. *Urban Institute*. Retrieved December, 13, 2008 from <http://www.urban.org>
- Hamilton, M. B. (2003). Online survey response rates and times: background and guidance for industry. Tercent, Inc.
- Independent Sector (2009). Value of Volunteer Time. Retrieved April 23, 2009 from http://www.independentsector.org/programs/research/volunteer_time.html.
- Issac, S. & Michael, W. B. (1995). *Handbook in research and evaluation* (3rd ed.). San Diego, CA: EdITS/Educational and Industrial Testing Services.
- King, J. & Safrit, R.D. (1998). Extension Agents' perceptions of volunteer management. *Journal of Extension*. 36(3). Retrieved November 22, 2008 from <http://www.joe.org/joe/1998june/a2.html>.
- Knowles, M.S. (1950) *Informal Adult Education*, New York: Association Press.
- Louisiana State University Agricultural Center. *The Louisiana 4-H Youth Development Volunteer Policy Handbook for 4-H Agents & Volunteer Managers*. Publication 2863. January 2002.
- Lynch, R. & McCurley, S. (1999). *Essential Volunteer Management*. Downers Grove, IL: Heritage Arts Press.
- McKee, R. K., Talbert B. A., & Barkman S. J. (2002). The challenges associated with change in 4-H/Youth Development. *Journal of Extension*. 40 (9). Retrieved March, 3, 2005 from <http://www.joe.org.proxy.lib.utk.edu:90/joe/2002april/a5.html>.
- Miller, L. E. (1998). Appropriate analysis. *Journal of Agriculture Extension*, 39(2), 1-10.

- Mississippi State University Extension. Mississippi 4-H Youth Development website. 4-H volunteer self study series. Retrieved November 16, 2009 from http://www.msucare.com4h_Youth/4hindex.html.
- National 4-H Headquarters (2009). 2007 4-H Youth Development ES-237 Statistics. Retrieved April 23, 2009 from <http://www.national4-hheadquarters.gov/library/2007-ES237-stats.pdf>
- Penfield, R. D. (2002). *The fundamentals of survey-based research: The science of collecting information from humans about humans*. Gainesville, FL: University of Florida.
- Penrod, K. M. (1991). Leadership involving volunteers. *Journal of Extension*, 29 (4), retrieved October 14, 2009, from <http://www.joe.org/joe/1991winter/a2002.html>.
- Points of Light Foundation & Volunteer Center National Network (2004). Tipsheet. Retrieved January 3, 2004 from www.PointsofLight.org.
- Rasmussen, M. F. (2003). Adult attitudes about youth participation in community organizations. *Journal of Extension*. 41(6). Retrieved March 23, 2005 from <http://www.joe.org.proxy.lib.utk.edu:90/joe/2003october/rb5.shtml>.
- Rasmussen, W. D. (1989). *Taking the University to the people Seventy-five Years of Cooperative Extension*. Ames, IA: Iowa State University Press.
- Rudd, R., Stedman, N.P. & Morgan, C. (2002). *Florida Cooperative Extension Volunteer Leadership Certification Program*. Paper presented at the Association of Leadership Educators Annual Meeting, Lexington, KY.
- Russell, S. T. (2001). The developmental benefits of nonformal education and youth development. *FOCUS*. Summer (11). Retrieved March 5, 2005 from <http://fourcyd.ucdavis.edu>
- Schmiesing, R. J. & Safrit, R. D. (2007). 4-H Youth Development professionals' perceptions of the importance of and their current level of competence with selected volunteer management competencies. *Journal of Extension*. 45 (3). Retrieved November 8, 2008 from <http://www.joe.org/joe/2007.june.rblp.shtml>
- Schlup, L. (1952). Fourteen basic features of Cooperative Extension work. (Eds.), *The spirit and philosophy of Extension work*. Washington, DC: Graduate School, United States Department of Agriculture and the Epsilon Sigma Phi, National Honorary Extension Fraternity.
- Seevers, B., Graham, D., Gamon, J. & Conklin, N. (1997). Management of volunteer programs. *Education through Cooperative Extension*. New York: Delmar Publishers.
- Smith, K. L. & Bigler, N. M. (1985). Keeping 4-H Volunteer Leaders. *Journal of Extension*. 23 (2). Retrieved November 22, 2008 from <http://www.joe.org/joe/1985summer/a3.html>.

Smith, S. S. & Finley, J. C. (2004). Targeted recruitment of 4-H volunteers involves understanding who currently volunteers and why. *Journal of Extension*. 42(4). Retrieved November 22, 2008 from <http://www.joe.org/joe/2004august/a6.shtml>.

Sinasky, M. & Bruce, J. (2007). Volunteers' perceptions of the volunteer management practices of county Extension 4-H educators. *Journal of Extension*. 45(3). Retrieved November 8, 2008 from <http://www.joe.org/joe/2007june/tt5p.shtml>.

Stedman, N. L. P. (2004). *Leadership, volunteer administration and 4-H: leadership styles and volunteer administration competence of 4-H state volunteer specialists and county faculty*. Unpublished doctoral dissertation, University of Florida.

Stone, B. & Edwards, H. (2008). National framework for 4-H volunteerism. National 4-H Headquarters, Cooperative State Research Education and Extension Service, United States Department of Agriculture. Retrieved April 14, 2009 from <http://www.national4-hheadquarters.gov>.

Taylor-Powell, E. , Hutchins G. & Reed R. (1997). *Community Service: What 4-H youth groups do to make a difference*. University of Wisconsin Cooperative Extension.

University of Tennessee Agricultural Extension Service. *Interview Questions for Potential 4-H Volunteers*. Publication F812. (1997).

University of Tennessee Extension. Tennessee State 4-H Website. Tennessee 4-H Facts and Figures. Retrieved November 12, 2009 from <http://www.utextension.utk.edu/4-H/aboutus/factsfigures.htm>.

Tennessee 4-H: A Timeless Tradition (2007). UT Extension SP249 [Brochure].

Thompson, S. K. (2002). *Sampling*. (pp. 35-38). (2nd Ed.). New York: Wiley.

Warner, P. D. & Christenson, J. A. (1984). *The Cooperative Extension Service: A National Assessment*. The Rural Sociological Society.

Warner, P.D., Christenson, J. A., Dillman, D.A., & Salant, P. (1996). Public perception of Extension. *Journal of Extension*. 34(4). Retrieved September, 7, 2007 from <http://www.joe.org/joe/1996August/a1.html>

Wiebers, J. A. (2001). *An evaluation of character counts!sm character education activities in relationship to the behavior of elementary school children in Sullivan County, Tennessee*. Electronic thesis. The University of Tennessee.

4-H: A Tennessee Tradition (n.d). Knoxville, TN. University of Tennessee Agricultural Extension Service.

4-H National Headquarters, USDA. Retrieved November 16, 2009 from <http://www.national4-hheadquarters.gov>

Appendix

Appendix A
University of Tennessee Extension Study
Formal Notification email letter
24 hour follow-up email
Reminder email
“Thank You” email

Dear Colleagues,

Volunteers are very important to every aspect of Extension. Volunteers are utilized in all areas of Extension outreach programs, especially youth development. There is a need for state-wide needs assessment of volunteer management. This needs assessment will be conducted by gathering information collected from 4-H Youth Development Extension Agents.

You have been asked to participate in a study about 4-H Volunteer Management. All UT Extension agents with 4-H job responsibility from across the state of Tennessee, have been selected as a participant to complete this study that is being conducted as part of my master's thesis work titled, "Volunteer Management Needs Assessment of the Tennessee 4-H Program." You will receive an email within the next couple of days linking you to a survey that will gather the information for this needs assessment. It is very important that you fill out this survey as it will help determine the accuracy of the information to be collected for this study.

You may be assured that all information will be in complete confidentiality. The information provided by you will only be used for the purpose of this study and your individual responses will in no way be linked in any manner that would disclose your identity.

The results of this survey will be made available to the State and Regional leaders within UT Extension.

I will be happy to answer any questions you might have. My contact number is 931-484-6743.

Sincerely,

Robbie B. Casteel
Extension Agent
4-H Youth Development
Cumberland County

Dear Colleague,

You previously received an email letter stating that you have been selected to participate in a study about 4-H Volunteer Management. As a 4-H professional, I am interested in studying the responsibilities and roles of your current position. My study is part of my master's thesis work, titled, "Volunteer Management Needs Assessment of the Tennessee 4-H Program." I am requesting your participation in completing this questionnaire by Wednesday, September 30th. To complete the questionnaire should take less than 10 minutes of your time. You can begin the survey by clicking on the link below. Thank you for your participation in this study.

Dear Colleague,

You previously received an email letter stating that you have been selected to participate in a study about 4-H Volunteer Management. As a 4-H professional, I am interested in studying the responsibilities and roles of your current position. My study is part of my master's thesis work, titled, "Volunteer Management Needs Assessment of the Tennessee 4-H Program." I am requesting your participation in completing this questionnaire by **Wednesday, September 30th**. To complete the questionnaire should take less than 10 minutes of your time. You can begin the survey by clicking on the link below. Thank you for your participation in this study.

Dear Colleague,

Thank you for your recent participation in a study about 4-H Volunteer Management. The survey questionnaire is a part of a study for my master's thesis work, titled, "Volunteer Management Needs Assessment of the Tennessee 4-H Program." The results from this study will be made available to regional and state departments as well as key stake holders in the Tennessee 4-H program. Thank you for your participation in this study and all you do for the 4-H youth of Tennessee.

Sincerely,

Robbie B. Casteel

Appendix B
Tennessee State University Extension Study
Formal Notification email letter
24 hour follow-up email
Reminder email
“Thank You” email

Dear Colleagues,

Volunteers are very important to every aspect of Extension. Volunteers are utilized in all areas of Extension outreach programs, especially youth development. There is a need for state-wide needs assessment of volunteer management. This needs assessment will be conducted by gathering information collected from 4-H Youth Development UT/TSU Extension Agents.

You have been asked to participate in a study about 4-H Volunteer Management. All UT/TSU Extension agents with 4-H job responsibility from across the state of Tennessee, have been selected as a participant to complete this study that is being conducted as part of my master's thesis work titled, "Volunteer Management Needs Assessment of the Tennessee 4-H Program." You will receive an email within the next couple of days linking you to a survey that will gather the information for this needs assessment. It is very important that you fill out this survey as it will help determine the accuracy of the information to be collected for this study.

You may be assured that all information will be in complete confidentiality. The information provided by you will only be used for the purpose of this study and your individual responses will in no way be linked in any manner that would disclose your identity.

The results of this survey will be made available to the State and Regional leaders within UT/TSU Extension.

I will be happy to answer any questions you might have. My contact number is 931-484-6743.

Sincerely,

Robbie B. Casteel
Extension Agent
4-H Youth Development
Cumberland County



Dear Colleague,

You previously received an email letter stating that you have been selected to participate in a study about 4-H Volunteer Management. As a 4-H professional, I am interested in studying the responsibilities and roles of your current position. My study is part of my master's thesis work, titled, "Volunteer Management Needs Assessment of the Tennessee 4-H Program." I am requesting your participation in completing this questionnaire by Friday, October 16th. To complete the questionnaire should take less than 10 minutes of your time. You can begin the survey by clicking on the link below. Thank you for your participation in this study.



Dear Colleague,

You previously received an email letter stating that you have been selected to participate in a study about 4-H Volunteer Management. As a 4-H professional, I am interested in studying the responsibilities and roles of your current position. My study is part of my master's thesis work, titled, "Volunteer Management Needs Assessment of the Tennessee 4-H Program." I am requesting your participation in completing this questionnaire by ***Friday, October 16th***. To complete the questionnaire should take less than 10 minutes of your time. You can begin the survey by clicking on the link below. Thank you for your participation in this study.



Dear Colleague,

Thank you for your recent participation in a study about 4-H Volunteer Management. The survey questionnaire is a part of a study for my master's thesis work, titled, "Volunteer Management Needs Assessment of the Tennessee 4-H Program." The results from this study will be made available to regional and state departments as well as key stake holders in the Tennessee 4-H program. Thank you for your participation in this study and all you do for the 4-H youth of Tennessee.

Sincerely,

Robbie B. Casteel

Appendix C

Informational 4-H Survey

VOLUNTEER MANAGEMENT NEEDS ASSESSMENT OF THE TENNESSEE 4-H PROGRAM

VOLUNTEER MANAGEMENT NEEDS ASSESSMENT OF THE TENNESSEE 4-H PROGRAM

State and Regional leaders are interested in knowing more about 4-H Agents volunteer management skills. As such, findings from this study would be very valuable in identifying the knowledge level of volunteer management, comfort level of working with volunteers and the need for an expanded formalized volunteer management system as identified by 4-H Extension Agents.

The survey should take approximately 10 minutes to complete. It is divided into four parts. The first three parts of the survey includes questions about your knowledge and expertise of volunteer management and the last part includes questions about demographics. All information requested in the questionnaire will be held in the strictest of confidence. The information provided by you will only be used for the purpose of this study and your individual responses will not be reported in any manner that would disclose your identity.

Please respond to every item in the questionnaire. Thank you for your cooperation.

1. Your participation in this study is voluntary. If you are willing to participate in this study please click “I Agree.” Or if you do not wish to participate please indicate “I do not agree.” Thank you in advance for you participation.

- ☐ I Agree
- ☐ I Do Not Agree

2. Please input your email address.

Part I

Part I of the survey contains questions related to the need for a formalized volunteer system within the University of Tennessee 4-H Youth Development department. Please check the box next to the answer that best completes the question.

3. 4-H Volunteer Leaders need specialized training for the position.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

4. 4-H Volunteer Leaders need written job descriptions.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

5. 4-H Volunteer Leaders need an orientation training program.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

6. 4-H Volunteer Leaders need a recognition program.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

7. 4-H Agents need a 4-H Volunteer Leader management handbook.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

8. 4-H Agents need 4-H Volunteer Leader management training.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

9. 4-H Agents need readily available 4-H Volunteer Leader management materials.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE
- ☐

10. 4-H Volunteer Leaders need access to 4-H Volunteer Leader management materials.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

11. 4-H Agents need a comprehensive 4-H Volunteer Leader management system.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

Part II

Part II of the survey contains questions related to your knowledge level of volunteer management skills. Please check the box next to the answer that best completes the question.

12. I can describe the role of 4-H Volunteers Leaders within UT Extension.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

13. I can write 4-H Volunteer Leader job descriptions.

- ☐ STRONGLY AGREE

- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

14. I can provide supervision to 4-H Volunteer Leaders.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

15. I can motivate 4-H Volunteer Leaders.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

16. I often recognize 4-H Volunteer Leader accomplishments.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

17. I can help 4-H Volunteer Leaders identify areas where change is needed.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

18. I can assess the success of a 4-H Volunteer Leader program.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

19. I can recruit 4-H Volunteer Leaders effectively.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

Part III

Part III of the survey contains questions related to your comfort level in working with 4-H volunteers. Please check the box next to the answer that best completes the question.

20. 4-H Volunteer Leaders are capable of carrying out 4-H programs.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

21. 4-H Volunteer Leaders are welcome within the school system.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

22. 4-H Volunteer Leaders can effectively meet with an after-school project group.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

23. I feel comfortable with 4-H Volunteer Leaders starting up a new county 4-H project group.

- ☐ STRONGLY AGREE
- ☐ AGREE

- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

24. I feel comfortable with 4-H Volunteer Leaders contacting key leaders within the community about 4-H programming.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

25. I can deny a 4-H Volunteer Leader for a position.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

26. I can remove a 4-H Volunteer Leader from a position.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

Question 27 refers to risk management. As defined by the Louisiana 4-H Youth Development Volunteer Policy Handbook. Risk Management is a structured process to protect an organization's assets, especially its human assets, from injury or loss

27. I understand risk management of 4-H Volunteer Leaders.

- ☐ STRONGLY AGREE
- ☐ AGREE
- ☐ NON-APPLICABLE OR NEUTRAL
- ☐ DISAGREE
- ☐ STRONGLY DISAGREE

Part IV

This part of the survey will collect your demographic information. Please check the box next to the answer that best completes the question.

28. Your gender.

- ☐ MALE
- ☐ FEMALE

29. Your age range.

- ☐ 20-24 YEARS
- ☐ 25-35 YEARS
- ☐ 36-45 YEARS
- ☐ 46-55 YEARS
- ☐ OVER 55 YEARS

30. Your Race/Ethnicity

- ☐ Asian or Asian American
- ☐ Native Indian
- ☐ Black or African American
- ☐ Hispanic
- ☐ Pacific Islander
- ☐ White
- ☐ Bi-Racial

31. How long have you been a Tennessee 4-H Youth Development Extension Agent?

- ☐ Less than 5 years
- ☐ 5-9 Years
- ☐ 10-19 Years
- ☐ 20-29 Years
- ☐ Over 30 Years

32. What percentage of your job is related to 4-H Youth Development?

- ☐ Less than 25%
- ☐ 25%-49%
- ☐ 50%-74%
- ☐ 75%-99%
- ☐ 100%

33. Which region of the state do you serve?

- ☐ Eastern
- ☐ Central
- ☐ Western

34. Have you ever served UT Extension in another role other than a 4-H Youth Development Agent?

- ☐ Yes
- ☐ No

35. Have you ever served as an Extension Agent in another state?

- ☐ Yes
- ☐ No

36. Outside of Extension have you ever had any job experience in employee or volunteer management?

- ☐ Yes
- ☐ No

37. Do you belong to any organized volunteer association?

- ☐ Yes
- ☐ No

38. Do you volunteer for any organization?

- ☐ Yes
- ☐ No

Appendix D

Measures of central tendency for objectives two, three and four including mean, median, mode, standard deviation and range.

Measures of central tendency for objective two including mean, median, mode, standard deviation and range.

	Statistics							
	I can describe the role of 4-H Volunteer Leaders within UT Extension.	I can write 4-H Volunteer Leader job descriptions.	I can provide supervision to 4-H Volunteer Leaders.	I can motivate 4-H Volunteer Leaders.	I often recognize 4-H Volunteer Leader accomplishments.	I can help 4-H Volunteer Leaders identify areas where change is needed.	I can assess the success of a 4-H Volunteer Leader program.	I can recruit 4-H Volunteer Leaders effectively.
N Valid	98	98	98	98	98	98	98	98
Missing	0	0	0	0	0	0	0	0
Mean	2.03	2.21	1.72	2.08	1.92	2.12	2.17	2.59
Median	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Mode	2	2	2	2	2	2	2	2
Std. Deviation	.695	.840	.513	.668	.821	.750	.825	.918
Range	3	3	2	3	3	3	3	3

Measures of central tendency for objective three, including mean, median, mode, standard deviation and range.

Statistics								
	4-H Volunteer Leaders are capable of carrying out 4-H programs.	4-H Volunteer Leaders are welcome within the school system.	4-H Volunteer Leaders can effectively meet with an after- school project group.	I feel comfortable with 4-H Volunteer Leaders starting up a new county 4-H project group.	I feel comfortable with 4-H Volunteer Leaders contacting key leaders within the community about 4-H programming.	I can deny a 4-H Volunteer Leader for a position.	I can remove a 4-H Volunteer Leader from a position.	I understand risk management of 4-H Volunteer Leaders.
N	Valid	98	98	98	98	98	98	98
	Missing	0	0	0	0	0	0	0
	Mean	2.05	2.97	1.85	2.19	2.63	2.17	2.48
	Median	2.00	3.00	2.00	2.00	2.50	2.00	2.00
	Mode	2	3	2	2	2	2	2
	Std. Deviation	.694	1.098	.632	.795	.957	.774	.806
	Range	3	4	3	3	3	4	4

Measures of central tendency for objective four, including mean, median, mode, standard deviation and range.

	Statistics								
	4-H Volunteer Leaders need specialize d training for the position.	4-H Volunteer Leaders need written job description s.	4-H Volunteer Leaders need an orientatio n training program.	4-H Volunteer Leaders need a recognitio n program.	4-H Agents need a 4-H Volunteer Leader manageme nt handbook.	4-H Agents need 4-H Volunteer Leader manageme nt training.	4-H Agents need readily available 4- H Volunteer Leader manageme nt materials.	4-H Volunteer Leaders need access to 4-H Volunteer Leader manageme nt materials.	4-H Agents need a comprehensi ve 4-H Volunteer Leader management system.
Valid	98	98	98	98	98	98	98	98	98
N Missin g	0	0	0	0	0	0	0	0	0
Mean	2.01	2.26	1.95	1.57	2.04	1.97	1.83	1.94	2.28
Median	2.00	2.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00
Mode	2	2	2	1	2	2	2	2	2
Std. Deviation	.601	.988	.664	.642	.849	.779	.658	.784	.883
Range	3	4	3	2	3	3	3	3	3

VITA

Robbie Casteel was born in Crossville, Tennessee. Being raised on the family farm, she grew up training and showing Tennessee Walking Horses and being active in the Cumberland County 4-H program. Robbie graduated Cumberland County High School in 1995.

Robbie attended Roane State Community College and obtained her Associate of Science degree in 1997. She completed her Bachelor of Science degree in Animal Science in 1999 from Middle Tennessee State University.

During college, Robbie completed an internship in equine reproduction and moved to Sherwood, OR to complete an internship in equine embryo transfers. Upon completion of her college internships, Robbie took a position as Trial Coordinator/Farm Manager for East Tennessee Clinical Research, an independent animal research company.

In September of 2004, Robbie became a University of Tennessee 4-H Youth Development Extension Agent in Cumberland County. There she enjoys working with her co-workers and 4-H Volunteer Leaders to facilitate youth development programs in Cumberland County. While working for UT Extension, Robbie has entered in the master's program of Agriculture and Extension Education.

Robbie is married to Heath Casteel and they have a daughter, Chloe. She stays active within the community and attends Grace Community Church. Robbie also still enjoys riding and showing Tennessee Walking Horses and travels the United States serving as licensed horse show judge.