

**4-H Wildlife Habitat Education Program: A Qualitative Study in Career
Exploration**

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

**Ronnie Lee Cowan Jr.
December 2015**

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DEDICATION

For my Uncle Jerry: Without his support and guidance I would have never been able to be a natural resources' educator. You showed me the true value of being a steward. Jerry, you were a torch bearer who shined the light for others with the shadow casted upon yourself. You were a selfless father figure and a great sportsman.

*"I was born country and that's what I'll always be.
Like the rivers and the woodlands wild and free.
I got a hundred years of down home running through my blood.
I was born country and this country's what I love."*

-Alabama

ACKNOWLEDGEMENTS

Dr. Carrie Stephens, my committee chair, my advisor, and my professor. She provided the expertise in qualitative research that aided in the implementation of this project. Her faith in the program and in myself enabled me to succeed when I was feeling overwhelmed. Dr. Craig Harper who, I have had the privilege to call my professor, my supervisor, and now my co-worker. He provided expertise on the Wildlife Habitat Education Program. Craig, was always willing to help and answer any questions I had during the data collection process.

My friend and retired Lewis County Extension Director Paula Spears, who took a chance on a young man from East Tennessee and hired him as an Extension Agent. Paula has played an important role in my professional career. She has been a mentor and was instrumental in giving me the skills to become a county director. Paula has always been kind to me and made me feel like family. This made my five hour move away from home easier.

My family, who has always showed me nothing but loving support my whole life. My Mother and Father instilled in me to always pursue your goals. They equipped me with the attitude and motivation that has gotten me this far in life.

My wife Heather Cowan, who supported me through the best and worst of times. Her faith and love brought her here to Lewis County. She moved four hours away from her life in Knoxville, Tennessee to begin her life with me. Without her guidance, I would be lost.

The residents of Lewis County, who have shown me nothing but respect and support since I have moved here. The people of Lewis County have been friendly and trust me with my responsibilities as their 4-H/agriculture agent.

ABSTRACT

There are documented studies on the Wildlife Habitat Education Program [WHEP] that relate to building life skills of participants. However, no literature was found that measured the perceptions of the participants towards a career in wildlife after participating in WHEP. A focus group was conducted at the Tennessee 4-H wildlife judging contest to describe the WHEP participants' perceptions of careers in wildlife after the completion of the annual program. Focus group participants indicated that participating in WHEP peaked their interest in wildlife and provided an opportunity to experience the importance of natural resource management.

TABLE OF CONTENTS

CHAPTER 1 Introduction and General Information.....	1
Introduction.....	1
Statement of Problem.....	4
Objectives/Purpose.....	5
Significance.....	5
Limitations of the Study.....	6
Assumptions of the Study.....	7
Definitions of Terms.....	7
Wildlife Habitat Education Program [WHEP]:.....	7
4-H Member.....	7
Wildlife Career.....	8
Wildlife.....	8
Career Development.....	8
CHAPTER 2 Literature Review.....	9
Social Cognitive Theory.....	9
Behavior-Participants Selecting a Career.....	11
Personal Factors-Attitudes of Participants Towards a Career.....	12
WHEP Program Description and Research.....	14
Summary.....	15
CHAPTER 3 Methods and Procedure.....	18
Research Design.....	18
Population and Sampling Frame.....	18
Measures/Instrumentation.....	19
Conditions of Testing.....	21
Data Analysis.....	21
Research Subjectivity.....	22
CHAPTER 4 Findings.....	24
Themes.....	24
Interest and Excitement Regarding Wildlife Management.....	24
Importance of Wildlife Professionals.....	25
Benefits and Challenges of Wildlife Management.....	25
CHAPTER 5 Conclusion.....	27
Discussion.....	27
Final Thoughts.....	31
Theme 1: Interest and Excitement Regarding Wildlife Management.....	31
Conclusion.....	31
Implications.....	32
Theme 2: Importance of Wildlife Professionals.....	33
Conclusion.....	33
Implications.....	34
Theme 3: Benefits and Challenges of Wildlife Management.....	35
Conclusion.....	35
Implications.....	36

Overall Implications and Recommendations.....	38
List of References	42
Appendix	47
Appendix A: IRB Approval.....	48
Appendix B: Informed Consent Statement	50
Vita.....	56

CHAPTER 1

INTRODUCTION AND GENERAL INFORMATION

Introduction

The passing of the Morrill Act of 1862 established the land grant university system (Comer, Campbell, Edwards, & Hillison, 2006). In 1857, Justin Smith Morrill introduced a land-grant bill to Congress that allowed for states to receive federal grants to establish training institutions for agriculture and industry (Comer et al., 2006). The Morrill Act of 1862 finally passed when President Lincoln signed the bill (Comer et al., 2006). As a result of the bill passing, research institutions began to educate agriculture producers on new farming techniques. However, many agriculture producers could not attend the research facilities or they were reluctant to try new practices. Extension educators needed to bridge the information that was vital to agriculture production with the people working together to improve their agricultural operations,

The Cooperative Extension Service began as the result of people working together to improve agriculture practices (Comer et al., 2006). Soon after, many institutions began having agriculture producer meetings where demonstrations and lectures dispersed information vital to agriculture (Comer et al., 2006). This began the demonstration movement lead by Seaman Knapp (Comer et al., 2006). Knapp believed farmers would adopt new techniques of agriculture if they could witness the new approaches on their own land (Comer et al., 2006). This idea was the foundation of Cooperative Extension Service (Comer et al., 2006).

After the formation of the land grant universities, Extension educators noticed a trend that many agriculture producers were reluctant to implement new practices discovered by the land grant universities. To combat this issue, Extension educators developed an idea that they could use the youth to intercede new techniques of agriculture practices with their families (Van Horn, Flanagan, & Thomson, 1998). This idea, 4-H, proved to be successful because educators found that the 4-H members were more open-minded about adopting new techniques (Van Horn et al., 1998). Through 4-H, the adults witnessed the youth's accomplishments with the newly adopted techniques and were convinced to implement the learned practices on their agriculture operations (Van Horn et al., 1998).

With the success of the youth applying knowledge, 4-H began incorporating school programs with the goal of creating opportunities and experiences in life development (Van Horn et al., 1998). These areas included curricula in life skills, career development, and citizenship (Van Horn et al., 1998). Overall, 4-H focused on the individual through (a) intellectual experiences, (b) compassion and caring about the community, (c) learning and applying new skills, and (d) living a healthy lifestyle: (Van Horn et al., 1998).

Currently, 4-H has over six million members and is the nation's largest youth development organization (National 4-H Council, 2014). 4-H supports youth through elementary school to high school by providing them with hands on learning activities that shape members into future leaders (National 4-H Council, 2014). 4-H is dedicated to providing programs that enhances the youth's ability to become active, healthy, and

productive citizens (National 4-H Council, 2014). 4-H also has the task to help the youth reach their full potential (Hensley, Place, Jordan, & Israel, 2007). The youth are presented with social barriers in their everyday life and it is 4-H's goal to provide programming that makes an impact on 4-H members (Hensley et al., 2007).

Politically, 4-H is focused on the elements pertaining to barriers youth face (Kress, 2005). An element addressing barriers 4-H members' face is creating a sense of belonging (Hensley et al., 2007). By 4-H making their members experience belonging, the clubs create an inclusive environment (Hensley et al., 2007). This environment supports 4-H members and provides encouragement through feedback from professionals, other club members, and family (Hensley et al., 2007). Ideally, the hope is 4-H members become motivated by the support and become respectful responsible citizens (Hensley et al., 2007). Therefore, being involved in 4-H can be an asset for a young person (Hensley et al., 2007). The more assets an adolescent has, the less likely they will be involved in less desirable behavior (Search Institute, 1996).

There are well documented studies on the Wildlife Habitat Education Program (WHEP) that relates to building life skills of participants (Allen & Elmore, 2012; Allen, Elmore, & Harper, 2013). The life skills discussed in these studies were teamwork, oral communication, written communication, social skills, decision making, and leadership (Allen & Harper, 2013). Responses from both youth and adults suggested participation in the WHEP had a positive effect on the improvement of the targeted life skills (Allen & Elmore, 2012). Allen, Elmore, and Harper (2013) also suggested participants of WHEP implemented wildlife management practices and taught wildlife management principles

to others (Allen et al., 2013). However, no literature was found that measured the perceptions of the participants towards a career in wildlife after participating in WHEP.

Career development is a life-long process of prepossessing the work force through choosing among employment opportunities made available to them (Ferry, 2006). Youth are influenced by many factors involving career development, such as their personal aptitude and educational fulfillment (Ferry, 2006; Bandura, Barbaranelli, Caprara, & Pastorelli, 2001). Therefore, Extension agents are challenged to provide programs to develop youth in their career choice (Ferry, 2006). Bandura, Barbaranelli, Caprara, and Pastorelli (2001) suggested Extension programs need to account for the participants' family, educational fulfillment, and social factors in facilitating career development. Therefore, the research gained from this study will assist Extension agents with understanding WHEP's impact on students' career choice.

Statement of Problem

The Wildlife Habitat Education Program (WHEP) is the only program offered by 4-H to teach youth about wildlife management (Allen & Elmore, 2012). In Tennessee WHEP is called 4-H wildlife judging. The program was developed to provide hands-on environmental education opportunities to teach youth the fundamentals of wildlife and fisheries science and appropriate management practices (Allen & Elmore, 2012). Allen, Elmore, and Harper (2013) found participants at the national WHEP competition apply what is learned to the community. No research has been found that examines the career choice in WHEP. The intensification of career development is an important goal of 4-H and should provide career education to instigate professional development

(Matulis, Hedges, Barrick, & Smith, 1998). The validity of WHEP needs to be examined to ensure WHEP is teaching the fundamentals of wildlife management that facilitates a career choice pertaining to wildlife. The fundamental problem this study will address is the participants' perceptions of a career in wildlife rather than just developing teamwork, oral communication, written communication, social skills, decision making, and leadership.

Objectives/Purpose

The purpose of this study was to describe the Wildlife Habitat Education Program [WHEP] participants' perceptions of careers in wildlife after the completion of the annual program. The central research question that guided this study is how do 4-H members view careers in wildlife after participating in WHEP?

Significance

The Wildlife Habitat Education Program (WHEP), called 4-H wildlife judging in Tennessee, is the only national program available in the 4-H program that teaches wildlife and fisheries management with a scientifically based curriculum created and managed by wildlife professionals (Allen et al., 2013). Nearly 10,000 4-H youth have participated in WHEP annually, and the numbers continue to grow (Harper, 2015). Research has shown youth education is enhanced through educational efforts that provide hands-on learning projects (Bourdeau, 2004). This study explored if the hands-on experiences provided by WHEP lead to a perception of career choices by the youth.

Previous literature indicated to 4-H professionals WHEP program does provide life skills. However, previous research does not show WHEP has any association with career exploration. 4-H professionals must ensure youth are provided opportunities to apply career choices learned in their 4-H project (Carlson & Maxa, 1998). This application of knowledge gained brings 4-H programs full circle in the education cycle (Carlson & Maxa, 1998). In addition, 4-H professionals are charged with youth development and the impacts made by each 4-H program demonstrates the success of a program (Carlson & Maxa, 1998).

The youth are the stakeholders because WHEP is the only national program for educating wildlife management. Furthermore, sportsmen and outdoor enthusiasts are also stakeholders. In the southern portion of the United States, outdoor enthusiasts spent \$23 billion on hunting and fishing, and \$8.9 billion for watchable wildlife. (Jones, Jacobs, Yarrow, & McPeake, 2008). Many interest groups, such as sportsmen and outdoor enthusiasts depend on wildlife professionals for providing guidance on hobby related activities (Jones et al., 2008).

Limitations of the Study

The results of this study are subject to the following limitations

1. A focus group was selected at the Tennessee wildlife judging contest and did not involve all of the participants of WHEP. The findings of this study should not be generalized beyond the sample, unless data confirms the sample is representative of other populations of the participants of WHEP.

2. The individual attitudes, beliefs, and choices of action did not change others perceptions.

Assumptions of the Study

The following assumptions were made for the purpose of this study

1. Participants in the focus group were not influenced by other members in the focus group.
2. Participants in the focus group responded truthfully.

Definitions of Terms

Wildlife Habitat Education Program [WHEP]:

Wildlife Habitat Education Program or in Tennessee, 4-H wildlife judging, will be defined as a 4-H youth natural resource program dedicated to teaching wildlife and fisheries habitat management to junior and senior level (ages 8-19) youth in the United States (Harper, 2015). WHEP also provides participants an opportunity to test their wildlife knowledge in a competition (Harper, 2015).

4-H Member

For this study, 4-H member will be defined as all youth, ages eight to nineteen, who are currently enrolled in 4-H and participating in the wildlife judging contest.

Wildlife Career

A wildlife career will be defined as someone who works in the field of wildlife management, research, or law enforcement.

Wildlife

Wildlife will be defined in the study by Merriam-Webster Dictionary (n.d.) as living things and especially mammals, birds, and fishes that are neither human nor domesticated.

Career Development

Career development is define as a process where the program gives a particular set of skills to help participants become successful in a career associated with the goals of the program (Rockwell, Stohler, & Rudman, 1984).

CHAPTER 2

LITERATURE REVIEW

Social Cognitive Theory

Social cognitive theory states human thought and behavior effected by direct and observational experiences (Bandura, 1986). Direct and observational experiences and physiological factors influence human behavior, while cognitive skills are built and the learning process is a function of three factors: 1) behavior 2) personal factors and 3) environment (Bandura, 1986). However, the three factors do not act at the same time (Bandura, 1986), and may be of unequal strengths. Bandura (1986) stated what people think, believe, and feel affect how they act and influences thoughts and emotions (Bandura, 1986). Perceptions are effected by the environment and as a result, personal factors change the environment (Bandura, 1986). Furthermore, behavior influences the environment and those conditions then affect behavior (Bandura, 1986).

“The Social Cognitive Theory makes some assumptions about learning and the performances of behavior. The assumptions address the interactions among persons, behaviors and environments; enacted and vicarious learning; the distinction between learning and performance: and self –regulation” (Schunk, 2012, p. 119). The personal factors include self-efficacy (Schunk, 2012). One achieves personal self-efficacy by providing feedback regarding progress (Schunk, 2012). Positive verbiage can be used to stress the belief they are doing well (Schunk, 2012). This process of an individual's view on progress towards outcome expectations, goals, and cognitive modeling are associated with self-regulations (Schunk, 2012). This self-regulation is a key component

of the Social Cognitive Theory (Schunk, 2012). The incorporation of goals, is an important aspect in learning (Schunk, 2012). Goal setting leads to self-evaluation and self-efficacy (Schunk, 2012).

The Social Cognitive Theory accounts for vicarious learning as a distinctive human quality (Bandura, 1986). Traditionally, psychological theories have emphasized learning through one's actions (Bandura, 1986). However, Bandura (1986) believed if knowledge and skills could only be obtained by experiences, the process of cognitive development would be tedious and hazardous. Bandura (1986) stated students could never transfer their requisite competencies if they had to be shaped in each new student by consequences without the benefit of a model. Humans have the capability for observational learning allows them to broaden their knowledge on the basis of information communicated by a model (Bandura, 1986).

Modeling refers to changes deriving from a model (Schunk, 2012). The influence of a model can spur new competencies, cognitive skills, and behavior patterns (Bandura, 1986). In addition, modeling can affect levels of motivation and restraints over behavior that has been previously learned (Bandura, 1986). Models can impact emotions that triggers emotional arousal in observers (Bandura, 1986). Bandura (1986) stated this arousal spawns new attitudes and perceptions towards places, things, and other people. Modeling influences can serve as motivators, inhibitors, disinhibitors, social facilitators, and emotion arousers (Bandura, 1986). Furthermore, learning from models can result in observers changing their behavior patterns (Bandura, 1986).

Behavior-Participants Selecting a Career

Individuals selecting a career in wildlife may have behaviors that are influenced by personal factors (attitudes of participants towards a career in wildlife) and the environment (4-H members participating in the Wildlife Habitat Education Program). One of many major turning points impacting 4-H members involve career choice (Ferry, 2006). Career development is a process of engagement with employment opportunities made available to individuals (Ferry, 2006). Although family and community serves as a starting point for workforce readiness, Extension professionals are challenged with creating programs that open new avenues of career development (Ferry, 2006). Furthermore, 4-H professionals must ensure youth are provided opportunities to apply what they have learned from involvement in their 4-H project (Carlson & Maxa, 1998). It is this application of knowledge gained that brings 4-H programs full circle in the education cycle (Carlson & Maxa, 1998)

Youth are influenced by many factors involving career development, such as their personal ability and educational fulfillment (Bandura et al., 2001). Ferry (2006) suggested one of these factors is the interdependence of family, school, and community culture. The interaction of family, school, and community help youth explore careers and learn how to make a career choice (Ferry, 2006). Furthermore, youth in communities appear to have more family support in career decision making (Ferry, 2006). Therefore, the family serves as models in career exploration (Ferry, 2006).

In addition to family, different social and economic contextual factors influence 4-H members in selecting a career (Ferry, 2006). Ferry (2006) found college bound youth

and work bound youth are influenced differently. College bound youth had career goals future oriented, while work bound youth had goals occupational oriented (Ferry, 2006). Also, work bound youth thought it was important to know what skills they were good at before seeking employment (Ferry, 2006). Both college bound and work bound youth indicated they sought after employment opportunities which influenced their skill development and educational attainment (Ferry, 2006). Therefore, it is important for Extension to engage youth in efforts to enhance career exploration and develop skills associated with the career being explored, while providing educational resources on a particular career (Ferry, 2006).

Participants of career exploration must have a sense of self-efficacy about the skills involved in career choice (Lancaster, Knobloch, Jones, & Brady, 2013). Self-efficacy is one's personal beliefs about performing certain behaviors at a particular level (Schunk, 2012). Lancaster, Knobloch, Jones, and Brady (2013) found not all participants are motivated to develop career skills. However, some are motivated by competing in 4-H judging contests and other fun activities (Lancaster et al., 2013). Ultimately, the career choice young adults make is embedded in their perceptions of the ideal job (Ferry, 2006).

Personal Factors-Attitudes of Participants Towards a Career

As stated previously, personal factors are influenced by behavior and the environment (Bandura, 1986). Attitudes are worth the time and energy of Extension professionals because they help identify activities and practices important in sustaining

communities (Guy & Rogers, 1999). Attitudes can also be measured to show perceptions of Extension's clientele towards programs goals (Guy & Rogers, 1999).

Evaluating the attitudes of participants can lead to finding motivational factors associated with participation (Erickson, Hodgkiss, Key, Brown, Goins, & Jones, 2010). Attitudes of participants can also reflect inhibiting factors ((Erickson et al., 2010). Attitudes also capture the importance of the program (Rasmussen, 2003). Participants who hold positive attitudes towards a specific program usually achieve higher learning and goal setting (Rasmussen, 2003). When attitudes of participants are being examined, it gives rise to recommendations for change to the program (Erickson et al., 2010) because organizations' employment criteria change often; therefore, programing needs to stay current with organizational needs (Kutilek, Gunderson, & Conklin, 2002). By qualitatively evaluating attitudes of participants, research can verify positive influence, negative influence, and a need for change (Erickson et al., 2010).

Generally, 4-H members have positive attitudes towards competitive events (Radhakrishna, Everhart, & Sinasky, 2006). Positive attitudes reflected a sense of beneficial growth, learning to succeed in college, provide better living, and in helping members achieve goals (Radhakrishna et al., 2006). Participants who had positive attitudes appear more motivated, demonstrate excellence, and aiding in setting goals (Radhakrishna et al., 2006).

WHEP Program Description and Research

Research indicates youth development is enhanced by participating in carefully planned programming efforts provide context to content through hands-on learning projects (Bourdeau, 2004). Currently, the Wildlife Habitat Education Program (WHEP) has over 10,000 participants nationwide (Allen & Elmore, 2012). 4-H participation has gone from five states in 1989 to 26 states by 2009 (Allen & Elmore, 2012). Participants gain knowledge in natural resource management through an involvement in WHEP and the contests associated with the educational programs conducted by coaches (Allen et al., 2013). The WHEP contest includes individual events and team events that cover wildlife identification, wildlife knowledge, wildlife management practices, a written wildlife management plan, and an oral defense of their written plan (Allen & Elmore, 2012).

Through participation in WHEP, applied natural resources management knowledge is gained as youth learn that managing wildlife includes management of habitat and wildlife populations (Allen & Elmore, 2012). Members must then apply this knowledge as they participate in the WHEP contest (Allen & Elmore, 2012). The activities of WHEP focus on developing content knowledge in the wildlife management field. The program structure of applying this knowledge may be responsible for participants' life skill development in the components of teamwork, written/oral communication, decision making, and leadership (Allen & Elmore, 2012). Previous literature has shown a need for programming in wildlife related issues. Keist, Moorman, DePerno, and Bardon (2010) found almost 70 percent of extension agents in their study

admitted lack of training in wildlife related issues were the number one limiting factor in their ability to conduct wildlife programming.

Summary

In general, participation in 4-H has been shown to develop life skills in participating youth (Diem, 2001). Life Skills are competencies that aid the youth in functioning within the environment which they live in (Ratkos & Knollenburg, 2015). Developing life skills is a key component of 4-H programming (Fitzpatrick, Gagne, Jones, Lobley, & Phelps, 2005). Fox, Schroeder, & Lodi (2003) examined life skill developed among 4-H members and alumni associated with membership in 4-H. Participation in 4-H programs have resulted in greater number of science classes and higher level classes in high school (Heck, Carlos, Barnett, & Smith, 2012). Heck, Carlos, and Smith (2012) study suggested 4-H programming has the ability to influence interest in careers in science and participation in long term application of methods learned. In addition, 4-H participation influences positive attitudes towards seeking a college education (Ward, 1996).

The understanding of the Social Cognitive Theory will aide in Extension's role as educators. "This theory makes some assumptions about learning and the performances of behavior. The assumptions address the interactions among persons, behaviors and environments; enacted and vicarious learning; the distinction between learning and performance: and self –regulation" (Schunk, 2012, p. 119). By understanding the interactions of environment, behaviors, and personal factors, agents can enhance their programming to facilitate learning. Agents are charged with the full circle of education,

which applies the application of knowledge gained through Extension's programming efforts (Carlson & Maxa, 1998). The personal factors include self-efficacy (Schunk, 2012). Extension agents achieve personal self-efficacy by providing feedback to students regarding their progress. This process of the participants' view on progress towards outcome expectations, goals, and cognitive modeling are associated with self-regulations (Schunk, 2012). This self-regulation is a key component of the Social Cognitive Theory (Schunk, 2012).

The modeling process can be beneficial in Extension's ability to create learning. Modeling refers to changes deriving from a model (Schunk, 2012). In this study, a model could be a wildlife professional performing the fundamentals of wildlife management. The professional would actually perform a management technique in steps and explain the key components through the process. This would be an example of a cognitive model (Schunk, 2012). Errors could also be incorporated in the demonstration to illustrate how the participants should handle mistakes. Overt guidance could be provided by allowing 4-H members to be models. The use of peer modeling can lead to high motivation (Schunk, 2012). "Observers who see models rewarded become motivated to act accordingly" (Schunk, 2012, p. 137). By promoting self-efficacy, 4-H members will see the rewards and be motivated to act like the models. This also will allow agents to provide feedback to enable a sense of self efficacy.

The incorporation of goals, is an important aspect in learning (Schunk, 2012). Goal setting leads to self-evaluation and self-efficacy (Schunk, 2012). Agents can present short term goals to students on what is expected. This allows them to self-

regulate and allow them to be motivated by seeing what they have accomplished. 4-H does a great job in self-set goals. This allows members to establish own goals which allows to higher motivation (Schunk, 2012). The environment 4-H provides should be a level playing field. 4-H does not discriminate on religion, ethnicity, or background (National 4-H Council, 2014). By utilizing Social Cognitive Theory, Extension should strive to create a learning environment that incorporates the interactions of behavior and personal factors. Bandura (1986) proclaimed factors such as what people think, believe, and feel affect how they act and behavior influences thoughts and emotions. This triadic reciprocity model of behavior, environment, and personal factors should help Extension agents realize learning is complex. The incorporation of these factors must be measured and weighed when creating programming for our clientele.

CHAPTER 3

METHODS AND PROCEDURE

Research Design

This study utilized a qualitative research approach that helped explain the views of 4-H participants in the Wildlife Habitat Education Program (WHEP) towards a career associated with wildlife. One of the main components of qualitative research is the focus on the point of views held by the participants in regards to a phenomenon (Ary, Jacobs, Sorensen, & Walker, 2014). The basic qualitative design approach was used for this study. Basic qualitative studies “provide rich descriptive data accounts targeted to understanding a particular point of view from the perspective of those involved” (Ary et al., 2014, p. 484). This approach lead to a descriptive analysis of the point of views (Dooley, 2007) needed to address the problem statement. Ultimately, the study provided a better understanding of what point of views the 4-H participants had towards a career in wildlife. The research method used a focus group to gather data. (Ary et al., 2014). The focus group allowed participants to share ideas with the group, which causes a reflection experience (Ary et al., 2014). In addition, this allowed the researcher to ask open ended questions based on participants’ responses.

Population and Sampling Frame

The target population for this study was the Tennessee wildlife judging participants (n=38). The sample consisted of nine, out of a possible 38, WHEP participants selected form the University of Tennessee Extension’s Eastern, Central,

and Western Regions. The focus group consisted of senior high 4-H members, ninth through twelfth grades, who participated in WHEP. The participants were recommended by their county 4-H agent. Then the researcher made contact with the parents and potential participant to seek their interest in becoming a member of the focus group. After the 4-H members agreed to participate in the study, the research had the parents and participant sign the consent form. The consent form went in to detail about the study and the minimal risks involved. Please see appendix section for consent form. The participants were then interviewed to gain their views of a career in wildlife after the state wildlife judging contest.

This type of sample is a purposive sample. A purposive sample utilizes select participants who can provide relevant information about the topic (Ary et al., 2014). Purposeful sampling assumes the investigator wants to gain insight and must select the sample that will provide the most learning opportunities (Dooley, 2007). The focus group participants were selected from 4-H wildlife judging teams placed in the top four in eastern, central, and western regions. This selection was made based on their success in WHEP and the ability to comprehend the fundamentals of wildlife management taught by WHEP.

Measures/Instrumentation

The data collection technique used in this study was interviewing a focus group. A focus group was utilized because the interview produced rich, qualitative information which can be used to identify what can be done, what worked and what did not, and why (Israel & Galindo-Gonzalez, 1992). The researcher served as the moderator during

the focus group meeting. The researcher was responsible to direct dialogue by using open ended questions or discussion topics (Israel & Galindo-Gonzalez, 1992). The researcher made notes on the dialogue and on the interactions between participants of the focus group (Israel & Galindo-Gonzalez, 1992). Also, the researcher conducted the interview questions around the purpose and needs of WHEP and the specified characteristic of views towards a career in wildlife (Israel & Galindo-Gonzalez, 1992).

The instrumentation utilized in this study was the semi-structured interview guide. The semi-structured interview guide provided a clear set of instructions for interviewers and achieved reliable, comparable qualitative data (Ary et al., 2014). In addition, the semi-structured interview provided the opportunity for identifying new ways of seeing and understanding the topic (Ary et al., 2014). The benefits of this guide allowed the questions to be prepared ahead of time, but allowed the participants the freedom to express views in their own terms (Ary et al., 2014).

The measure of this study was the viewpoints and feelings shared by the participants in the focus groups. Human thoughts and emotions were measured descriptively, which is associated with qualitative research (Ary et al., 2014). The following is the list of questions that were asked to the focus group.

- How has your knowledge of wildlife management changed after participating in WHEP?
- How has your attitude toward a career in wildlife changed after participating in WHEP?

- Have your views on what wildlife professionals actually do changed since participating in WHEP? If so, how?
- Do you think that you are more likely or less likely to pursue a career in wildlife, given your experiences in this program?
- What kind of things do you think you would do to prepare for a career in wildlife?
- What is a wildlife career to you?
- What do you think you do in a career in wildlife?
- What are the challenges in preparing for a career in wildlife?

Conditions of Testing

The focus group was interviewed in an informal setting. The group meet approximately one and half hours. The focus group took place in the afternoon before dinner. The moderator ensured the participants were comfortable. Since the meeting began before dinner, the participants brought snacks and drinks to the focus group meeting. The participants were notified their responses to the open ended questions were transcribed and recorded.

Data Analysis

For this study, data was collected through a focus group interview. The viewpoints and feelings expressed within the focus group were recorded promptly in a word document and audio recorded for accuracy. The moderator organized the data so it can be easily retrieved. The individual participants were assigned a letter (A, B, etc.)

to protect their identities. Words were transcribe directly and all speech was noted to avoid potential bias (Ary et al., 2014). Transcriptions were made of all data. In addition, a reflective log was recorded to capture their thoughts as they occur.

After reading through the transcriptions multiple times, we organized the data into themes. This method allowed the researchers to examine the data and focus on repeated phrases or evidence of answers to the research question which has been formulated (Ary et al., 2014). After coding the data into themes, researchers compared their coding and came to an agreement on outgoing themes in the data. The data was reexamined jointly to develop titles of each theme. In conclusion, the researchers then began to include data as further evidence for each theme. The researchers found three common themes: which a) Interest and excitement Regarding Wildlife Management b) Importance of Wildlife Professionals c) Benefits/Challenges to Wildlife Management.

Trustworthiness in the degree of confidence that the findings represent the respondents and their context (Dooley, 2007). In order to gain trustworthiness, the focus group was recorded and then transcribed verbatim into Microsoft Word. Then the researchers listened to the audio recordings many times for accuracy. Additionally, researcher compared all notes and transcriptions.

Research Subjectivity

Two researchers were involved in this study: (a) an agricultural leadership and communication master's student and (b) a professor of agricultural leadership and education. The master's student researcher has completed a bachelor's degree in wildlife management and fisheries science. In addition this researcher is employed as a

county extension director with responsibilities in both adult and youth natural resources education. The professor of agricultural leadership and education is a former school-based agricultural education teacher and has recently published works in the areas of leadership, STEM, education, and college instruction. In addition, this researcher has prior experience with qualitative data collection techniques, including facilitating focus groups, and has published qualitative works.

Collectively, we believe 4-H members construct attitudes, beliefs and behaviors towards career exploration before they pursue a career. We believe participation in 4-H play a role in member's ability to comprehend life skills, critical thinking skills, and setting goals. Furthermore, we believe 4-H can be an asset to the youth's livelihood by allowing members to apply the newly learned skills in their communities. These beliefs influenced and provided the basis for the theoretical lens of this study.

CHAPTER 4

FINDINGS

Themes

The participants provided very detailed information about their perceptions of a career choice in wildlife management. Many of the response brought fourth deeper analysis of the validity of WHEP. After analysis of the focus group responses, the opinions and beliefs could be coded into three themes which are interest and excitement regarding wildlife management, importance of wildlife professionals, and benefits and challenges associated with wildlife management. The themes provide insight into how WHEP 4-H participants feel about wildlife management. The focus group members provided descriptive accounts of their experiences in the program.

Interest and Excitement Regarding Wildlife Management

The focus group agreed the Wildlife Habitat Education Program (WHEP) peaks an interest in wildlife and creates excitement about helping wildlife. Participant B and C gave intricate descriptions of how they look forward to learning more about wildlife management. For example, Participant C stated, “WHEP definitely peaks your interest in wildlife, and this program makes the participants excited, so they tell other people about it.” The consensus of the focus group was the excitement created by WHEP translated to a desire of applicability. For example, Participant B affirmed, “In this program, I have seen there is a lot to learn. WHEP opens the door to do so and to apply what we learn.” Focus group members agreed WHEP was very content based but offers a reasoning component. Participant A added, “The most difficult part is the

reasoning component but it adds quality to the program. I think the focus shifts to the ability to apply what is learned.”

Importance of Wildlife Professionals

Responses indicated WHEP participants were introduced to wildlife officers, land managers, and wildlife educators. In addition, participants A, D, E, and I indicated WHEP gave a purpose to be in the outdoors. Participant D stated, “This program [WHEP] gave me a practical aspect of going out in the woods and looking at birds and studying animals.” Although the consensus was the participants had experience in wildlife before participating in WHEP, the program gave purpose to wildlife management and demonstrated a need for wildlife management. Participant H mentioned, “I have always been into wildlife, but this gives me a reason to learn about it and how to do something about it.” The participants also stated they understood the importance of wildlife professionals. For example, Participant H expressed, “I always thought of nature as something that nobody necessarily had to help with, but the more I learn about WHEP and the Tennessee Wildlife Resources Agency the more I understand how important these careers are.”

Benefits and Challenges of Wildlife Management

The focus group participants believed WHEP integrated other fields of science. Participant E said, “I think WHEP has not necessarily made me more or less interested in a career in wildlife but it has opened my eyes to how relevant wildlife is and natural resources in general tied into other career fields, particularly engineering. That is the

field that I want to go in.” Participants E, G, and J believed WHEP connected other career fields by allowing individuals to practice decision making skills and accomplish objectives. In addition, the focus group participants indicated WHEP gave them a perspective of how other fields of science interact upon each other. Participant E stated, “This program emphasizes we do not exist in a bubble and an internship would be great way to gain experience in dealing with these complex systems of natural resources.”

According to the responses given during the focus group meeting, Participants A, C, D, and H understood some of the challenges associated with a career in wildlife. A common response was working with people can create challenges for wildlife professionals. Participant C and G believed it was more about managing people and not wildlife. Participant G shared “This program has also opened doors to wildlife management and showed me it is more than just managing animals and the environment but it also involves people and people are hard to manage sometimes.” The difference in opinions can be a challenge.” Participant C added “The challenge is not just between educated people vs. uneducated people but within differences by opinions. These are very complex systems to work in. There gray areas, there are slight differences in techniques and sometimes it is not necessarily right or wrong.” However, Participants E, G, and J indicated WHEP does communicate the benefits of wildlife management. Participant H mentioned, “This program does shed light to the challenges but goes in detail about the benefits to wildlife management. This program shows us the benefits are worth the challenge.”

CHAPTER 5

CONCLUSION

Discussion

Previous literature discussed the life skills associated with the Wildlife Habitat Education Program (WHEP). Allen and Elmore (2012) collected responses from both youth and adults indicated participation in WHEP had a positive effect on the improvement of life skills such as, teamwork, oral communication, written communication, social skills, decision making, and leadership. In addition, previous research conducted at the National 4-H Wildlife Judging Contest found WHEP 4-H participants were more likely to implement wildlife management practices and teach others about wildlife management principles (Allen et al., 2013).

Life skills are competencies that aid the youth in functioning within the environment which they live in (Ratkos & Knollenburg, 2015). Developing life skills is a key component of 4-H programming (Fitzpatrick et al., 2005). Since 4-H is a publicly funded and a product of the land grant university, life skills are important to demonstrate the positive differences 4-H achieves in the lives of our youth (Fitzpatrick et. al, 2005). In addition, the applicability of the participants of WHEP to apply what is learned enhances the validity of the program. Keist, Moorman, DePerno, and Bardon (2010) found almost 70% of extension agents in their study admitted lack of training in wildlife related issues were the number one limiting factor in their ability to conduct wildlife programming. By having WHEP 4-H participants teach or apply wildlife principles, this program may be able to aid in wildlife related educational programming.

This study is exploring another key component of 4-H programing, which is career development. Career development is a lifelong process of engaging the work force through choosing among employment opportunities made available to them (Ferry, 2006). Youth are influenced by many factors involving career development, such as their personal ability and educational fulfillment (Bandura et al., 2001). Therefore, Extension Agents are challenged to provide programs that support youth in their career choice (Ferry, 2006). Bandura's Social Cognitive Theory, (1986) suggested youth educators need to account for participants' environment, behavior, and personal factors in facilitating career development. For this the environment was 4-H participation in WHEP and the behavior was participants selecting a career in wildlife. Furthermore, the personal factor selected was WHEP 4-H participants' perception of a career in wildlife.

Personal factors are influenced by behavior and the environment (Bandura, 1986). In the context of this study, the personal factor of interest was attitudes of participants towards a career in wildlife. The nine focus group participants (n=38) saturated the data with positives attitudes and perceptions. Attitudes are worth the time and energy of Extension professionals because they help identify activities and practices important in sustaining communities (Guy & Rogers, 1999). Attitudes can also be measured to show perceptions of Extension's clientele towards programs goals (Guy & Rogers, 1999). The environment WHEP creates does appear to spawn perceptions of a career in wildlife. When asked if they were more likely to pursue a career in wildlife,

Participant G responded, “Yes, it has also opened my mind about going into wildlife and the management of it.”

Furthermore, WHEP gives an introduction to selecting a career in the field of wildlife management and other fields of science. According to Participant C, “WHEP gives us some really good connections with the professionals who run the program and make it fun to learn. This also allows us how to show others what we learned and the principals involved and how to treat the resources involved.” Participant E added, “This program has made me realize how relevant other sciences are in principles of wildlife, especially engendering. That’s the field I want to go into.”

In addition to WHEP facilitating an environment that promotes perceptions of career development, Participants H, C, G, and B indicated WHEP made them realize how important wildlife management and wildlife professionals are for the state’s natural resources. This has implications much further than career development. For example, life skills are applied when participants exert these skills. Focus group participants indicated this gave them value for wildlife and other components of nature. Stewardship was a key word mentioned throughout the focus group meeting. Participant G stated, “I feel WHEP is about doing what we can to achieve landowners objective. The challenges are time and resources like money but ultimately being a good steward that’s what it takes to be a wildlife manager.” One can postulate these perceptions may enhance public compliance with the goals of wildlife management.

4-H professionals must ensure youth are provided opportunities to apply what they have learned from involvement in their 4-H project (Carlson & Maxa, 1998). It is

this application of knowledge gained that brings 4-H programs full circle in the education cycle (Carlson & Maxa, 1998). 4-H professionals are charged with youth development and when positive impacts from a program are demonstrated, the success of the program is revealed (Carlson & Maxa, 1998). Overall, this study found WHEP fits the education cycle by peaking interest in wildlife and introducing participants to the importance of natural resource mismanagement. The cooperation of life skills and career exploration increase the validity of WHEP. The program associates life skills, career exploration, and the fundamentals of wildlife management to our youth.

WHEP was developed to provide hands-on environmental education opportunities to teach youth the fundamentals of wildlife and fisheries science and appropriate management practices (Allen & Elmore, 2012). This study found WHEP not only does that but impacts much more. Studies have shown the WHEP builds life skills, demonstrates the importance and justification of wildlife management and wildlife professions. In addition, this study found WHEP enables 4-H participants to see the complexity of our natural resources and connects other fields of science. Furthermore, WHEP enables 4-H participants to have perceptions of a career in wildlife management or a related field of science. 4-H Agents can take this information and promote WHEP to audiences with career goals pertaining to fields of science. Furthermore, the validity of the program can be communicated to stakeholders so others can see how WHEP can make a positive difference in our youth's career choice.

Final Thoughts

After the data was coded into three themes, the information given during the focus group interview was further analyzed by the researchers. Conclusions, Implications, and future research questions, were formatted by theme. By itemizing each theme, one can postulate the perceptions held by 4-H WHEP participants.

Theme 1: Interest and Excitement Regarding Wildlife Management

Conclusion

According to the responses given by the participants of the focus group interview, interest and excitement were key words. This study found participation in WHEP leads to a greater interest in wildlife management. Furthermore, this interest is causing 4-H WHEP participants to communicate the fundamentals of wildlife management. For example, Participant C stated, "WHEP definitely peaks your interest in wildlife, and this program makes the participants excited, so they tell other people about it."

The consensus of the focus group was WHEP made them excited to learn about wildlife management. Responses indicated this excitement lead to a desire to apply what is learned to the landscape. . For example, Participant B affirmed, "In this program, I have seen there is a lot to learn and it takes a lot of doing I mean in the real world and what this program does. WHEP opens the door to do so and to apply what we learn." Focus group members agreed WHEP is very content based but offers a reasoning component. Focus group member A added, "The most difficult part is the reasoning component but it adds quality to the program. I think the focus shifts to the ability to

apply what is learned.” The focus group participants all agreed the interest and excitement of wildlife management gave them an understanding of how important wildlife professionals are in managing our state’s natural resources.

Implications

This study validates that WHEP promotes a behavior associated with selecting a career. Bandura (1986) stated what people think, believe, and feel affect how they act and behavior influences thoughts and emotions. WHEP utilizes factors that involve career development. Bandura, Barbarabelli, Capara, and Pastorelli (2001) stated youth are influenced by many factors involving career development, such as their personal ability and educational fulfillment. The excitement for learning the fundamentals of wildlife management is an indication of educational fulfillment. In addition, the focus group was held at the [State] 4-H Wildlife Judging Contest, proving the participants held the personal ability to comprehend the fundamentals taught.

The research reported indicated the interest or excitement created by WHEP led participants to apply and communicate the fundamentals of wildlife management they learned back to their communities. This indicates WHEP is accounting for Ferry’s (2006) statement that 4-H professionals must ensure the youth are provided opportunities to apply what they have learned for involvement in their 4-H project. Furthermore, WHEP is giving 4-H participant to experience the skills necessary in a wildlife management career. Ferry (2006) found youth thought it was important to know what skills they were good at before selecting a career. Since WHEP 4-H participants are applying the

knowledge gained, the 4-H program is brought full circle in the educational cycle of learn by doing.

Theme 2: Importance of Wildlife Professionals

Conclusion

WHEP introduces 4-H participants to professionals who work in a wildlife related field. These wildlife professionals are affectively communicating the importance of wildlife management. For example, participant H mentioned, “I have always been into wildlife, but this gives me a reason to learn about it and how to do something about it.” The participants also stated they understood the importance of wildlife professionals. Furthermore, participant H expressed, “I always thought of nature as something that kind of happen. I use to think nobody necessarily had to help but the more I learn about WHEP, and the wildlife professionals, the more I understand how important these careers are.”

In addition, the wildlife professionals facilitate WHEP are communicating a purpose for wildlife management. The 4-H WHEP participants indicated this program gave them a purpose to be in the outdoors. Participant D stated, “WHEP gave me a practical aspect of going out in the woods and looking at birds and studying animals.” Although the consensus was the participants had experience in wildlife before participating in WHEP, the program gave purpose to wildlife management and demonstrated a need for wildlife management. Participant H mentioned, “I have always been into wildlife, but this gives me a reason to learn about it and how to do something

about it.” Also, the interaction with wildlife professionals led the focus group to share their perceptions about some of the challenges and benefits associated with a career in wildlife.

Implications

The wildlife professionals that conduct WHEP are effective models in facilitating change and generating perceptions of career development. The influence of a model can spur new competencies, cognitive skills, and behavior patterns (Bandura, 1986). In addition, modeling can affect levels of motivation and restraints over behavior that has been previously learned (Bandura, 1986). Models also express emotions that triggers emotional arousal in observers (Bandura, 1986). Bandura (1986) stated this arousal spawns new attitudes and perceptions towards places, things, and other people. Modeling influences can serve as instructors, motivators, inhibitors, disinhibitors, social facilitators, and emotion arousers (Bandura, 1986). Furthermore, learning from models can result in observers changing their behavior patterns (Bandura, 1986).

The Social Cognitive Theory accounts for vicarious learning as a distinctive human quality (Bandura, 1986). This study found the 4-H WHEP participants are gaining perceptions of a wildlife career form the wildlife professional models. Learning from models can result in observers changing their behavior patterns (Bandura, 1986). In this study, the result of this changed behavior was the phenomenon of 4-H participants’ excitement to apply the skills learned back to their community.

The research reported showed the models share the importance and need of wildlife management. Therefore, the 4-H WHEP participants may return to their

communities and communicate the need of wildlife management. The 4-H WHEP participants can assume the role of a learning model to the general public by sharing their perceptions of a wildlife career. The transfer of knowledge to the general public could communicate the importance and need of wildlife management and wildlife professionals. Once this knowledge is gained by the communities, greater public compliance of the science and reasoning behind wildlife management can be achieved.

Theme 3: Benefits and Challenges of Wildlife Management

Conclusion

This study found the participation in WHEP allowed the 4-H participants to experience the benefits associated with wildlife management. The focus group participants believed a benefit of WHEP was the integration of other fields of science. Participant E said, “I think the Wildlife Habitat Education Program hasn’t necessarily made me more or less interested in a career in wildlife but it has opened my eyes to how relevant wildlife is and natural resources in general tie into other career fields, particularly engineering. That is the field I want to go in.” Participants E, G, and J believed WHEP connected other career fields by allowing individuals to practice decision making skills and accomplish objectives. In addition, the focus group indicated WHEP gave them a perspective of how systems interact upon each other. Participant E stated, “This program emphasizes we don’t exist in a bubble and an internship would be great way to gain experience in dealing with these complex systems.”

According to the responses given during the focus group meeting, 4-H WHEP participants understood some of the challenges associated with A common response

was working with people can create challenges for wildlife professionals. Participant C and G believed it is more about managing people and not wildlife. Participant G shared “This program has also opened doors to wildlife management and showed me it’s more than just managing animals and the environment around them but involves people and it’s sometimes hard to manage around people. The difference in opinions can be a challenge.” Participant C added “the challenge is not just between educated people vs. uneducated people but within differences by opinions and goals. These are very complex systems to work in. They are gray areas, there are slight differences in techniques and sometimes it not necessarily right or wrong.” However, Participants E, G, and J indicated WHEP does communicate the benefits of wildlife management. Participant H mentioned, “This program does shed light to the challenges but goes in to great detail about the benefits to wildlife management. This program shows us the benefits are worth the challenge.”

Implications

The research reported found WHEP incorporates other fields of science other than wildlife management. This could have implications of achieving higher WHEP participation. This information can be presented to other interest groups. Furthermore, this program may be spawning perceptions of career development outside of wildlife. In addition, WHEP is utilizing other techniques such as decision making skills and setting objectives transferable to other career choices.

By sharing the challenges and benefits of wildlife management, WHEP is preparing participants that have an interest in a wildlife career. A common word shared

by respondents was complexity. WHEP allows students to understand Wildlife management involves working with people. Furthermore, 4-H WHEP participants indicated they could see how other fields of science are important and integrate with wildlife management. The complexity of natural resources led participants to believe internships would be vital in pursuing a career in wildlife management.

By allowing the 4-H WHEP participants to experience some of the challenges and benefits of wildlife management, WHEP accounts for self-efficacy. WHEP achieves personal self-efficacy by providing feedback regarding progress (Schunk, 2012). Positive verbiage can be used to stress the belief they are doing well (Schunk, 2012). This process of an individual's view on progress towards outcome expectations, goals, and cognitive modeling are associated with self-regulations (Schunk, 2012). This self-regulation is a key component of the Social Cognitive Theory (Schunk, 2012). The incorporation of goals is an important aspect in learning (Schunk, 2012). Goal setting leads to self-evaluation and self-efficacy (Schunk, 2012). When asked about working with people, goals were mentioned throughout the focus group meeting. 4-H WHEP participants learned how to meet goals of the landowner and the wildlife professional.

This study found WHEP creates positive attitudes towards a career in wildlife and wildlife management. Focus group response indicate the benefits outweighed the challenges. Furthermore, passion and stewardship were key words during the interview. Attitudes are worth the time and energy of Extension professionals because they help identify activities and practices important in sustaining communities (Guy & Rogers, 1999). Attitudes can also be measured to show perceptions of Extension's clientele

towards programs goals (Guy & Rogers, 1999). Evaluating the attitudes of participants can lead to finding motivational factors associated with participation (Erickson et al., 2010).

Overall Implications and Recommendations

The research reported found the Wildlife Habitat Education Program (WHEP) creates excitement and peaks an interest in wildlife management among participants of the state 4-H wildlife judging contest. Furthermore, this interest and excitement is leading to a desire to apply the skills learned to the participants' communities. 4-H could utilize this research to strengthen the validity of the organization's programming efforts. This study found WHEP adheres to 4-H's mission of application. Historically, 4-H strived to teach fundamental practices to youth and relay the knowledge back to the communities. In order to sustain this desire of applicability, WHEP should continue to peak interest and excitement in wildlife management. Further research should be conducted to identify what elements of WHEP peak interest and excitement. In addition, WHEP could examine how many acres of land are impacted by the application of skills learned by WHEP participants. This knowledge could lead to a greater understanding of the impact WHEP has on the landscape.

Responses indicated participation in 4-H wildlife judging allowed an understanding of how important wildlife management careers are in protecting and enhancing natural resources. Furthermore, the professionals who conduct 4-H wildlife judging communicate a justification and purpose for wildlife management. The research reported found these professionals were successful models that cued emotional

arousal. In addition, participants indicated perceptions of a behavioral change regarding career exploration.

4-H should examine the models of WHEP to facilitate change. In addition 4-H could adopt similar models in other programs offered to youth. WHEP should consider sharing the research reported with other agencies that conduct principles of wildlife management. These professional could see the appreciation and respect given by the 4-H wildlife judging participants. With models communicating a justification and purpose of wildlife management, 4-H members may relaying this information to adults. This would achieve greater compliance with the science associated with wildlife management and regulation. Further research should be conducted on a national level that measures the perceptions of outdoor enthusiasts regarding the fundamentals of wildlife management. This question could give insight on the transfer of knowledge between adults and youth.

Research reported indicated the 4-H wildlife judging participants gained knowledge of the benefits and challenges associated with a career in wildlife management. Participants' postulated wildlife management integrates other fields of science. 4-H could utilize this complexity in promoting WHEP. 4-H professionals could offer this to students who have interests other than wildlife management. Further research needs to be conducted to examine WHEP's ability to incorporate other fields of science. In addition, further research could examine what are the sciences involved in wildlife management.

The participants claimed working with people could be a challenge but working with objectives and setting goals could address this challenge. Setting objectives and goals are key elements in 4-H programming. 4-H professionals could incorporate the fundamentals used by WHEP when teaching youth how to set and reach goals. Further research needs to be conducted on the participants' ability to achieve goals while working in a team.

Participants indicated WHEP's reasoning component provided an opportunity to use critical thinking skills. 4-H utilizes critical thinking skills in their educational programs. WHEP's ability to incorporate decision making skills strengthens the validity of 4-H programming. In addition, participants feel WHEP provided skills that aid in college enrollment and career exploration. Wildlife professionals gave them an introduction of what to expect when pursuing a degree. Response indicated that experience was important in career exploration and WHEP provided an experience. Previous literature found youth seek experience when choosing their "idea job". A key word in the focus group was passion. 4-H wildlife judging participants believe a person who pursues a career must be passionate about the job they are performing. The consensus of the focus group was WHEP created emotional triggers regarding wildlife management. Further research needs to examine if wildlife professionals participated in WHEP or similar activities. Furthermore, research needs to examine how many WHEP participants seek college enrollment.

Overall, the focus group, nine out of the possible thirty eight, saturated the data with positive attitudes regarding a career in wildlife. Participants indicated WHEP gave

them needed experience to apply the knowledge learned and to consider a career choice. Furthermore, WHEP gave them an appreciation of wildlife management professionals and a need for wildlife management. According to the research reported, WHEP, at the state 4-H wildlife judging contest, is bringing the educational cycle full cycle by incorporating career exploration, life skills, critical thinking skills, and applicability.

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APPENDIX

APPENDIX A: IRB APPROVAL

June 1, 2015

Ronnie Lee Cowan
UTIA - EXT-Lewis
County Lewis County
Courthouse
Hohenwald, TN 38462--0000

Re: UTK IRB-15-02288-XP

Study Title: 4-H Wildlife Habitat Education Program: A Qualitative Study in Career

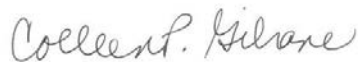
Exploration Dear Mr. Cowan:

The Administrative Section of the UTK Institutional Review Board (IRB) reviewed your **application** for the above referenced project. It determined that your application is eligible for **expedited** review under 45 CFR 46.110(b)(1), categories (6) and (7). The IRB has reviewed these materials and determined that they do comply with proper consideration for the rights and welfare of human subjects and the regulatory requirements for the protection of human subjects. Therefore, this letter constitutes full approval by the IRB of your application version 1.1, as submitted. Approval of this study will be valid from June 1, 2015 to May 31, 2016.

In the event that subjects are to be recruited using solicitation materials, such as brochures, posters, web-based advertisements, etc., these materials must receive prior approval of the IRB. Any revisions in the approved application must also be submitted to and approved by the IRB prior to implementation. In addition, you are responsible for reporting any unanticipated serious adverse events or other problems involving risks to subjects or others in the manner required by the local IRB policy.

Finally, **re-approval** of your project is required by the IRB in accord with the conditions specified above. You may not continue the research study beyond the time or other limits specified unless you obtain prior written approval of the IRB.

Sincerely,



Colleen P. Gilrane,
PhD Chair
UTK Institutional Review Board

APPENDIX B: INFORMED CONSENT STATEMENT

INFORMED CONSENT STATEMENT- (Parent's Permission)

4-H Wildlife Habitat Educational Program: A Qualitative Study in Career Exploration

Introduction

You are receiving this consent form because your child has been identified to participate in a research study by your county 4-H Agent. The study will be conducted by Ronnie Cowan Director of UT Extension Lewis County. With your permission, Ronnie Cowan will contact your child via telephone call to explain that the study will focus on the viewpoints, attitudes, and feelings of a career in wildlife after completing the Wildlife Habitat Education Program (WHEP). If you as the parent declines, then your child will not be contacted. A script of the phone conversation can be seen below. By executing this document, you, the parent, and the Investigator acknowledge and agree on the terms of the child's involvement in the research and the child will sign the assent form (See Below) at the 2015 State Wildlife Judging, which will allow him/her to participate in the study.

Information about Participants' (child) Involvement in the Study

The child, with parental permission will be contacted via phone call to acquire their willingness to participate in a focus group and to the use of the information gained from the focus group in a graduate thesis and written research publications describing the perceptions of participants towards a career in wildlife, subject to the following terms and conditions:

- a. The information obtained during this project will be used to write research publications and a graduate thesis that may be read by the participant and other individuals.
- b. The child, with parental permission has to sign an assent form the day of the focus group meeting at the 2015 State 4-H Wildlife Judging Contest that allows them to participate in a focus group and allows them to understand that the focus group meeting will last approximately one hour and a half. There will only be one focus group meeting conducted. The child will be asked to share his or her attitudes, perceptions, and viewpoints towards a career in wildlife. How the child structures his or her story and what information they choose to share will be up to the participants of the focus groups. The child may choose to share personal stories. The child's response will not be confidential and must sign the assent form stating that others may weigh in on their thoughts and opinions. However, the children will be asked to keep all responses or statements of other participants in the focus group confidential.

- c. The audio recording of the focus group will be stored in a locked filing cabinet in the Lewis County Court House. The investigator (Ronnie Cowan) will transcribe the recordings.
- d. The participant will receive a copy of the final research report soon after completion.

_____ Investigator's Initials

_____ Parents/Guardian Initials

Risk

The risks are minimal for participating in this study. If the Participant chooses to share personal stories, be cautioned that those stories may be included in the final written report and heard by other focus group members. The focus group will be asked to keep all responses or statements of other participants in the focus group confidential and the Investigator will use a pseudonym for the Participant's name in the written report to remain anonymous and minimize this risk

Benefits

WHEP is the only national program available in the 4-H program that teaches wildlife and fisheries management with a scientifically based curriculum created and managed by wildlife professionals. This study will explore if the hands-on experiences provided by WHEP lead to career choices by the youth. The resolution of this question will address the career development skills that are associated with 4-H programs. In addition, the results of this study will determine the attitudes of 4-H youth towards career development within the wildlife profession and also assess the preparedness of the youth towards wildlife careers. This study will be instrumental in filling the gaps of how 4-H can facilitate more positive attitudes towards career development within the wildlife profession and to ensure the WHEP is preparing positive perceptions among future wildlife professionals, which will ensure the betterment of our natural resources.

Confidentiality

The information in the study records will be kept confidential. Data will be stored in a locked filing cabinet in Kay Henley's office located in BO1 Lewis County Court House. Data will be made available only to persons conducting the study unless participants specifically give permission in writing to do otherwise. The identity of the participants will not be publicly disclosed and all possible efforts will be made to avoid references in oral or written reports that could be used to link participants to the study.

Contact Information

If you or your child has any questions at any time about the study or the procedures, he or she may contact myself, Ronnie Cowan at (931) 796-3091. If the Participant has any questions about her rights as a participant, contact Research Compliance Services of the Office of Research at (865) 974-7697.

Participation

Participation is entirely voluntary. The participant may refuse to participate or discontinue participation in this research project at any time. If the Participant decides to participate, he or she may withdraw from the study at any time without penalty. If the Participant decides to withdraw from the study, information or material provided by her will be excluded from the study and returned to her or destroyed.

Phone Script:

Hello, my name is Ronnie Cowan. Your Parents and your 4-H Agent say that you are willing to help me. All you have to do is truthfully answer questions about the Wildlife Habitat Education Program and have an open discussion with your peers about the Wildlife Habitat Education Program. I think that what we will learn from your work and will help other children and wildlife professional. Are you willing to help with this project? _____. Great! I think you will find that these things are easy and fun to do. If you decide that you don't want to do this anymore, all you have to do is tell me. You can just say, "I don't want to participate anymore."

I really appreciate your help!

Consent

I have read the above information. I have received a copy of this form. I agree for my child to participate in the study.

Parent/Guardian of Participant's Signature _____ Date _____

Investigator's Signature _____ Date _____

4-H Wildlife Habitat Education Program: A Qualitative Study in Career Exploration

I. Assent is required for children (17 years of age and under) participating in a research study. Assent must be obtained in addition to parental consent. : To be signed by the child at the 2015 State 4-H Wildlife Judging Contest

II. The examiner will use the following procedures during the focus group meeting

- Ask open ended questions to spur discussion. Some of the questions are as follows:
 - ❖ How has your knowledge of wildlife management changed after participating in WHEP?
 - ❖ How has your attitude toward a career in wildlife changed after participating in WHEP
 - ❖ Have your views on what wildlife professionals actually do changed since participating in WHEP? If so, how?
 - ❖ Do you think that you are more likely or less likely to pursue a career in wildlife, given your experiences in this program?
 - ❖ What kind of things do you think you would do to prepare for a career in wildlife?
 - ❖ What is a wildlife career to you?
 - ❖ What do u think you do in a career in wildlife?
 - ❖ What are the challenges in preparing for a career in wildlife?
- Give general reinforcement by means of these example comments

"That is a great point"

"I never thought of it that way!"

"I can see that you feel strongly about this"

"We must respect everyone's viewpoint."

III. The examiner will use the following procedures during the focus group meeting

- If the child wishes to stop during the testing, the examiner will maintain a neutral expression, close the booklet, and say, "All right, thank you for helping me again"
- When the Focus group meeting is completed, the examiner will say, "Thank you for helping me again. You have really worked hard and gave me a better understanding on how the Wildlife Habitat Education Program impacts our 4-H members on career development

IV. These behavioral management guidelines will be followed during the focus group meeting:

- Prompts will include phrases such as:
"Remember there is no right or wrong answers."

"Keep listening carefully."

"Please wait until I am finished with the question before you give your answer."

"Please respect your peers, feelings"

"Please be honest this is a safe place and no one will know your name outside of this room"

- The focus group will consist of 12 children between the ages of 14 through 18 and a member of the senior high 4-H program.
- The location at which the focus group will be conducted is at the State Wildlife Judging Contest. A comfortable room with snack and refreshments will be provided.

V. Information about Your Involvement in the Study

You, with parental permission, consents to be a participant in a focus group and to the use of the information gained from the focus group in a graduate thesis and written research publications describing the perceptions of 4-H Wildlife Habitat Education Program participants towards a career in wildlife, subject to the following terms and conditions:

- The information obtained during this project will be used to write research publications and a graduate thesis that may be read by the participant and other individuals.
- The Participant (you) agrees to participate in a focus group and understands that the meeting will last approximately one hour and half. There will only be one focus group conducted The Participant will be asked to share his or her attitudes, perceptions, and viewpoints towards a career in wildlife. How the Participant, (you) structures his or her story and what information they choose to share will be up to the participants of the focus groups. The Participant (you) may choose to share personal stories. Your response will not be confidential and must sign a consent form stating that others may weigh in on their thoughts and opinions. However, the children will be asked to keep all responses or statements of other participants in the focus group confidential.
- The audio recording of the focus group will be stored in a locked filing cabinet in the Lewis County Court House. The Investigator (Ronnie Cowan) will transcribe the recordings.
- You will receive a copy of the final research report soon after completion.

Child(Participant)_____

***Signed by the child at the 2015 State 4-H Wildlife Judging Contest**

Principal Investigator_____

VITA

Ronnie Lee Cowan Jr. was born in 1986 in Seymour Tennessee located in Sevier County. He graduated from Seymour High School in 2005. Following high school Ronnie attended Roane State Community College majoring in Wildlife and Fisheries Science. In 2009, he began his studies at the University of Tennessee, Knoxville where he graduated in the spring of 2012 with a Bachelor of Science Degree in Wildlife Management and Fisheries Science with a minor in Forestry. Ronnie began his career with the University of Tennessee Extension as a 4-H/Agriculture Agent in 2013. Soon after, he was accepted into the Agriculture Leadership, Education, and Communication graduate program at the University of Tennessee, Knoxville.