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### A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Agricultural and Extension Education

by

Fawn Kurtzo
University of Arkansas
Bachelor of Science in Agricultural, Food and Life Sciences
in Agricultural Education, Communications and Technology, 2015

### May 2017 University of Arkansas

This thesis is approved for recommen	dation to the Graduate Council.	
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#### Abstract

Assessment of the Arkansas horse 4-H program utilized stakeholders' perceptions to describe inputs, outcomes, preferences and impacts provided by the Arkansas Cooperative Extension Service. Stakeholders' perceptions were captured through three studies. Studies included the following: a pre- and post-test evaluation of the 2016 summer horse camp, purposive interviews with county agents (n = 6), volunteer leaders (n = 4), and parents (n = 4) of horse 4-H clubs, and a statewide survey provided to Extension staff (n = 26) and volunteer leaders (n = 28) affiliated with horse 4-H clubs.

The 2016 summer camp evaluation found the goals to improve horsemanship, safety, and interest in horse projects were largely fulfilled. Innovative practice to design, implement and evaluate the camp were found effective.

Purposive interviews revealed implementation factors presented by club members, program staff, communities and determined program outcomes. Interviews also explored communication aptness. Emergent themes described need for supportive parents, safe horses, and inexpensive competitive/educational opportunities among diverse youth. Levels of support provided by Extension staff and/or parents effects volunteer leaders' ability to facilitate clubs. Geographic location and community resources impact club opportunities. All clubs provide positive youth outcomes, a source of motivation among stakeholders. Information about club opportunities is commonly received through email, then shared with diverse audiences and channels. Equine-related information and knowledge is sought from the state's Extension headquarters, personal resources, and youths' educational opportunities.

Club characteristics, program staff characteristics and program outcomes were described by Extension staff and volunteer leaders through statewide mixed-mode surveys. Impacts

associated with club participants included equine interests, access to resources, parental support, and financial capacity. Impacts associated with program staff included internal relationships, horse-related competencies, horse-related interests, stakeholder support, and club membership levels. Both clubs and program staff are impacted by the availability of community resources. Program outcomes were largely positive at youth and community levels.

Recommendations include reporting program outcomes to improve parental engagement and support, thereby improving youth recruitment and retention. Strategy meetings at the club and program staff levels are recommended to foster support and innovation. Recommendations for future research include exploring the impact of volunteer leader management practices.

#### Acknowledgements

When I walked through the doors of the Agricultural Education, Communications, and Technology (AECT) department of Dale Bumpers College of Agricultural, Food and Life Sciences (Bumpers College), I was on a mission to overcome my greatest weakness — communications. My experience as a graduate student has truly enabled me to reach this goal. The confidence and skillsets I have gained are a direct product of the dedicated faculty, experiential learning, supportive staff and talented peers I have encountered throughout this incredible journey.

My advisor, thesis chair, and mentor, Dr. Leslie Edgar, was an unwavering source of support and inspiration as I navigated educational, research and personal interests. Her wealth of knowledge, bravery and compassion have fed my success and willingness to tackle new challenges. Thank you for reminding me to believe in the long shot.

Special recognition is due to the many individuals who spend their time and resources as volunteer leaders and supportive adults in youth programs. Your selfless example provides a legacy in the lives of the future. As a horse 4-H alumna, the experiences preparing, competing, winning, and losing with my horse project have undoubtedly improved my life skills.

Finally, the honorable support of family, friends and my home community have propelled me to continue pursuing this journey. The roots have kept me humble and grounded throughout this great adventure. Thank you all.

# **Dedication**

This thesis is dedicated to my hero, mom. May I always remember the word *hard* only means it takes longer.

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#### **List of Published Papers**

- Kurtzo, F., Edgar, L. D., Graham, D. L., & Russell, M. (In review). Implementation factors and communication aptness of Arkansas horse 4-H clubs according to associated stakeholders. *Submitted to the Journal of Human Sciences and Extension*.
- Kurtzo, F., Edgar, L. D., Graham, D. L., & Russell, M. (In review). Arkansas horse 4-H program stakeholders' perceptions generate program assessment. *Submitted to the Journal of Human Sciences and Extension*.
- Kurtzo, F., Edgar, L. D., & Graham, D. L., & Russell, M. (In review). Straight from the hors(man)'s mouth: Innovative 4-H camps. *Submitted to the Journal of Extension*

Chapter 1

Introduction

#### **Need for the Study**

Evaluations are an essential element of Extension programs' efficacy and support (Franz, Arnold, & Baughman, 2014; Rennekamp & Arnold, 2009; Wholey, Hatry, & Newcomer, 2010). Formative evaluations, also referred to as assessments, at the implementation stage can outline internal and external factors affecting the delivery of a program, and ultimately, improve program execution (Duerden & Witt, 2012; Rennekamp & Arnold, 2009). Although the practice of reviewing program implementation is less popular among Extension professionals, Duerden and Witt (2012), explain a lack of understanding within the processes of program execution threaten the validity of program outcome findings. Summative evaluations that focus on program outcomes, or impacts, are more popular and primarily serve as measurements of accountability to increase stakeholder support (Radhakrishna & Bowen, 2010; Rennekamp & Arnold, 2009).

Duerdin and Witt (2012) described coordinators of resilient programs should be knowledgeable about internal and external aspects associated with the program to ensure stakeholders' needs are fulfilled, and additional coordinators can replicate the procedures.

Individuals with a stake in programs have been discussed with great importance in evaluation-type processes as program input resources (Diaz, Jayaratne, Bardon, & Hazel, 2014), sources of power (Wholey, Hatry, & Newcomer, 2010), and ultimately, a target audience of evaluation results (Connors, 2012). Many researchers recommend reviewing and reporting program impacts to increase stakeholder support (Hedrick, Homan, & Dick, 2009; Homan, Dick & Hedrick, 2007; Merten, Locke, Williams, Carter, & Lehman, 2014; West, Drake, & Londo, 2009).

#### **Statement of the Problem**

Programs that lack formal reviews, as the demand for documentation of program impacts are on the rise are at risk in the modern "accountability era" (Radhakrishna & Bowen, 2010, para. 11). The majority of high priority research questions in the 2016-2020 American Association for Agricultural Education National Research Agenda seek to identify the effectiveness of methods, models, practices and programs (Roberts, Harder, & Bradshears, 2016). This focus is a reflection of the need for greater efficiency in programs, omnipresent funding cuts, and evolving interests of stakeholders (West, Drake, & Londo, 2009).

A unique importance for formative and summative evaluation is found within the volunteer audience of Extension programs (Connors, 2012; Culp, 2013). Volunteers provide critical outreach services to Extension programs and serve in many roles (Graham, Arnold, & Jayaratne, 2016, Chapter 6; Vettern, Hall, & Schmidt, 2009). At the implementation level, volunteers influence program delivery with their service in clerical, administrative and coordination positions (Arnold, Dolenc, & Rennekamp, 2009; Nestor, McKee, & Culp, 2006; Radhakrishna & Ewing, 2011). Upholding concern and respect for volunteers' performance in these roles through a performance evaluation has been found to improve sustainability of the program and volunteerism (Culp, 2013). Additionally, sharing program impacts with volunteers has been identified as a source of motivation to get, and stay, involved (Farris, McKinley, Ayres, Peters, & Brady, 2009; Washburn, Cornell, Traywick, Felix, & Phillips, 2015).

A nationwide assessment found many Extension professionals do not conduct formal evaluations, rather, simple participation records (e.g. gender, race, ethnicity) are commonly reported to comply with state and federal requirements (Lamm & Israel, 2013). Workman and Sheer (2012) found only 5.6% of articles in the *Journal of Extension* with focus on evaluation

results from 1965-2009, reported long-term program impacts. Such evaluation practices among Extension staff pose threats to the future of 4-H programs as the organization faces the need to increase youth retention (Hamilton, Northern, & Neff, 2014; Harder, Lamm, Lamm, Rose, & Rask, 2005), increase volunteer leader retention (Terry, Pracht, Fogarty, Pehlke, & Barness, 2013), and defend financial support (Bitsch & Thornsbury, 2010; Torppa & Smith, 2009).

According to the Arkansas Extension equine specialist, many of the national issues have crept into the Arkansas horse 4-H program, and stakeholders remain largely unidentified (M. Russell, personal communication, February 2, 2016). Despite a six-year increase in state show participants, youth dropout rates increase as members reached adolescence (M. Russell, personal communication, February 2, 2016).

The program is unable to identify all county Extension staff associated with horse-related 4-H clubs, nor all counties of youth with equine interests (M. Russell, personal communication, February 2, 2016; N. Washburn, personal communication, March 8, 2016). In addition, the program lacks documentation of any formal evaluations or needs assessments, and awareness of volunteer leaders is limited to direct, personal experience of the state equine specialist (M. Russell, personal communication, February 2, 2016).

Therefore, the program faces a limited capacity to secure program sustainability and stakeholder support. Horse 4-H clubs aim to provide equal opportunities and replicate program outcomes throughout the state; however, limited insight about program implementation threatens the actual outcomes (Duerden & Witt, 2012; Rennekamp & Arnold, 2009). Moreover, a limited awareness of volunteer leaders' needs and experiences restricts the program's capacity to effectively recruit and retain (Culp, 2013) the volunteer leaders it heavily relies on (M. Russell, personal communication, February 2, 2016).

Finally, the lack of formal documentation of program outcomes restricts the ability to improve participant recruitment (Homan, Dick & Hedrick, 2007), parental support (Hedrick, Homan, & Dick, 2009), community support (Merten, Locke, Williams, Carter, & Lehman, 2014) and funding sources (West, Drake, & Londo, 2009).

#### **Purpose of the Study**

The purpose of this study was to capture stakeholders' perceptions of the Arkansas horse 4-H program through the following research projects: (1) a goal-based evaluation of the 2016 horse 4-H summer camp, (2) purposive interviews with stakeholders throughout the state, and (3) a statewide survey. Analysis of stakeholders' perceptions aim to identify internal and external factors affecting program implementation as outlined in the Implementation Issues Framework (IIF) (Abell, Cummings, Duke, & Marshall, 2015), and identify stakeholder communication tendencies and preferences as identified in Berlo's Source-Message-Channel-Receiver model of communication (Berlo, 1960). Figure 1 outlines the three compounding articles created as a part of this research, and how they support the theoretical framework outlined in this study.

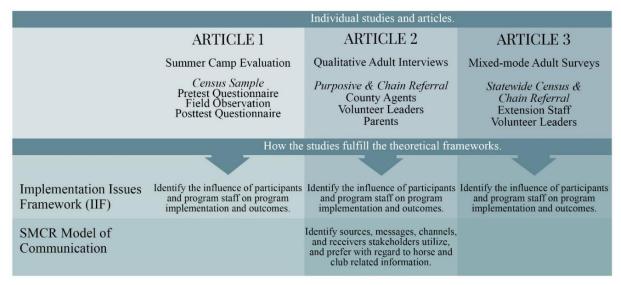


Figure 1. Article identification and theoretical framework outline.

#### 2016 summer camp evaluation.

The purpose of this formative evaluation was to measure camp accountability, enhance services to participants and increase recruitment of stakeholders. Kirkpatrick's evaluation model (1998) provided flexible guidance for the pre- and post- test questionnaires and the daily field observation guide. The following objectives guided the evaluation of the 2016 Arkansas summer horse camp:

- 1) Describe participants' reactions.
- 2) Describe participants' learning.
- 3) Describe participants' behaviors, and.
- 4) Describe the overall camp results.

#### **Purposive interviews.**

This qualitative study sought purposive interviews with county agents, volunteer leaders and parents associated with the [State] horse 4-H program to capture the essence of program implementation. The following objectives guided the study:

- 1) Describe factors associated with program participants, staff, and community.
- 2) Describe the program outcomes.
- 3) Identify sources, channels, messages and receivers of club and equine information.

#### Statewide survey.

The purpose of this study was to describe positive and negative impacts on the implementation of Arkansas' horse 4-H program. The following objectives guided the study:

- 1) Describe club characteristics.
- 2) Describe program staff characteristics.
- 3) Describe program outcomes.

#### **Significance of the Study**

West, Drake, and Londo (2009) projected, "Extension now faces the same problem that threatened and ultimately led to the demise of the Pony Express: survival in changing times" (para. 1). The studies included in this research project supplement knowledge gaps in administrative staff of the Arkansas horse 4-H program; therefore, improving the ability to navigate evolving stakeholder interests.

The pretest, posttest, and field observation guide instruments created and used in the first study can be utilized in future Arkansas horse 4-H youth camps to measure program outcomes. Interview results of the second study provide insight to factors affecting program implementation, direct program needs, and direct volunteer leader needs – all viable resources to improve program accuracy and better enable program staff. Stakeholders' perceptions of program outcomes can be featured during recruitment of participants (Homan, Dick & Hedrick, 2007; Hedrick, Homan, & Dick, 2009), recruitment of volunteer leaders (Farris, McKinley, Ayres, Peters, & Brady, 2009; Washburn, Cornell, Traywick, Felix, & Phillips, 2015), and in the pursuit of funding support (West, Drake, & Londo, 2009).

The survey instrument created and used in the third study is a unique asset to the horse 4-H industry as it explores program needs and factors affecting implementation based on specific stakeholder groups. The horse 4-H program is a popular interest among youth as evidence of program existence is identifiable from university and Extension service websites in all 50 states. However, prior research is limited to the identifying: youth outcomes (Anderson & Kar-Lillienthal, 2011; Arnold & Nott, 2010; Beck, Rayfield, Flowers, & Jones, 2010; Cole, 2005; Nadeau, Alger, & Hoagland, 2007; Nadeau, Alger, Hoagland, & Chameroy, 2004; Pendry & Roeter, 2011; Pendry, Roeter, Smith, Jacobson, & Erdman, 2013; Saunders-Ferguson, Barnett,

Culen, and TenBroeck, 2008) volunteer leader needs (Arnold & Nott, 2012; Bailey, Waite, & Wilson, 2013; Cottle & D'Angelo, 2015; Deen, 2000; Galloway & Gallagher, 2002; Greene & Dawson, 2002; Rusk, Kerr, Talbert, & Russell, 2001; Walker, Cater, Davis, & Fox, 2017); youth educational resources (Brady, Griffin, & Kline, 2003; Denniston, 2004), leadership practices (Voigt, Talbert, McKinley, & Brady, 2014), fundraising efforts (Smith, Goodspeed, Gunnell, & Olsen, 2017), innovative competition ideas (Walls & Denniston, 2003), and evaluation planning (Braverman & Engle, 2009).

#### **Definition of Terms**

**4-H program** – "one of the program areas of Extension work, the objective of which is to help youth acquire the life skills and knowledge necessary to grow and succeed in a rapidly changing and complex society. The mission of the 4-H youth development program is to create supportive environments in which culturally diverse youth and adults can reach their fullest potential" (Seevers & Graham, 2012, p. 256).

**4-H project** – "a structured learning experience for 4-H youth that enables them to learn, make, or do something. Project work can include both individual and group efforts that emphasize the "learn-by-doing" approach and incorporate real-life experiences. Project topics are available in a wide variety of interests to attract youth from all backgrounds, ages, and levels of ability" (Seevers & Graham, 2012, p. 256).

**Bronfenbrenner's ecological systems theory**- "Behavior is viewed as being affected by, and effecting, multiples levels of influence" (McLeroy, Bibeau, Steckler, & Glanz, 1988, p. 354). This theory is illustrated by a series of rings, starting with "you" in the center and extending outward through microsystem, mesosystem, exosystem, macrosystem and chronosystem (Tregaskis, 2015, p. 17).

**Berlo's Source-Message-Channel-Receiver model of communication** – processes and methods of disseminating and receiving information (Berlo, 1960).

Club – "group of youth or adults organized for a common purpose. Most clubs have officers and a program of work or activities to accomplish their mission. A club may be organized on a community basis (e.g., community or school boundary or section of a city) or it may be organized to study specific interests, such as photography. Extension educators' work primarily with 4-H clubs and Family and Community Education clubs (formerly called Extension Homemaker clubs). Working through clubs is an efficient method for reaching and teaching specific audiences" (Seevers & Graham, 2012, p. 253).

**Coding** – "involves taking text data or pictures gathered during data collection, segmenting sentences (or paragraphs) or images into categories, and labeling those categories with a term, often a term based on the actual language of the participant (called an in vivo term)" (Creswell, 2014, p. 197-198).

Cooperative Extension Service – "a public-funded, non-formal, educational system that links the education and research resources of the U. S. Department of Agriculture (USDA), land-grant universities, and county administrative units. The basic mission of this system is to help people improve their lives through an educational process that uses scientific knowledge focused on issues and needs" (Seevers & Graham, 2012, p. 254).

**County Agent** – "the Extension educator employed at the local county or parish level. The number of agents per country varies according to community size and support. The agent's primary responsibilities are educator and advisor, and transferring the findings of research and new technology to the solution of problems in the community, farm/ranch, or home. The specific title of this position may vary from state to state with such titles as Farm Agent; County Agent;

Agriculture, Home Economics or 4-H Agent; Youth Development Agent; Family and Consumer Science Educator" (Seevers & Graham, 2012, p. 254).

**Horse Project** – "a great way to learn more about the horse industry, as well as animal nutrition, horsemanship, health and reproduction. Horse project participants can demonstrate their knowledge and abilities through horse shows, public speaking contests, hippology, quiz bowl and judging" (Division of Agriculture, 2011, p. 9).

**Implementation Issues Framework (IIF)** –A contemporary theory designed for Extension staff to consider the outside forces that can cause effects on the inputs, outputs and outcomes of a program design. It features rings of influence on programs, and reciprocally, the potential of programs to influence the multiple levels, similar to Bronfenbrenner's Ecological Model (Abell, et al., 2015).

**ISOTURE model** – "comprised of seven separate but interrelated volunteer functions: identification, selection, orientation, training, utilization, recognition, and evaluation" (Seevers & Graham, 2012, p. 214).

**Life skills** – "competencies that help young people function in the environment in which they live" (Seevers & Graham, 2012, p. 258).

**Specialists** – "faculty members with expertise and specialized knowledge in a particular subject-matter area. They are involved in translating and disseminating research-based material to county Extension agents and their clientele groups. Specialists usually have a doctoral degree with rank equivalent to the campus professor system" (Seevers & Graham, 2012, p. 260).

**Themes** – "appear as major findings in qualitative studies and are often used as headings in the findings sections of studies. They should display multiple perspectives from individuals and be supported by diverse quotations and specific evidence" (Creswell, 2014, p. 199-200).

**Volunteer Leader** – an individual who provides influence, actions, skills or otherwise valuable attention to Extension programs without financial compensation (Seevers & Graham, 2012; United States Department of Agriculture, 1971).

#### **Assumptions**

The following assumptions existed in this study:

- County Extension staff were aware of 4-H youths' participation in horse-related activities
  and could therefore select the most appropriate level of equine activity among 4-H
  members in their county.
- 2. Participants comprehended questions and provided open, honest responses.
- 3. Survey participants were willing to use the open-ended response space and were willing to take the opportunity to provide "other" responses.

#### Limitations

This study was limited by the following:

- 1. Due to collecting data during events and activities, the following disruptions occurred:
  - 2016 summer horse camp pre- and post-tests were completed in two different settings. The pre-test was completed after introductory camp meeting on the first day, prior to camp activities. The room was quiet and participants did not have any discussion, similar to taking a test at school. The post-test was completed on the last day after the final camp activity during lunch as camp administrators made a few announcements and several youth were eating, talking, and greeting parents.

- Some adult interview participants did not have the opportunity to answer all questions on the interview guide due to time constraints, bad cell phone service, unexpected interruptions or the distraction of event responsibilities (n = 4).
- Recruitment efforts for all studies occurred between June and November 2016; therefore, establishing contact with participants in the agricultural sector was difficult and the researcher faced a strict time limit for data collection.
  - Interviews were conducted at three events and via telephone at the participants' convenience. Therefore, the purposive interviews from district were not equal (Ozark = 6, Ouachita = 3, Delta = 5).
  - The researcher relied on Extension staff with 4-H appointments to describe the levels of horse activity among youth in their county for statewide survey recruitment. Some county 4-H staff members were out of the office conducting field work or completing training sessions; therefore, the level of participation in horse 4-H projects, clubs or events was not attainable for five percent of counties (*n* = 4) and those counties were not provided the opportunity to participate in the statewide survey.
- 3. No database existed to identify horse 4-H clubs, Extension staff or volunteer leaders associated with clubs prior to research efforts. Therefore, chain referral systems were used to identify participants and bias may have occurred.
  - The equine specialist identified and categorized highly motivated and poorly motivated horse clubs according to personal perceptions.

- Extension staff provided contact information for volunteer leaders. It is unknown
  whether all volunteer leaders were provided the opportunity to participate in the
  survey.
- 4. All counties (n = 75) were provided a short qualification questionnaire to identify levels of horse 4-H interest in their county, accept/deny the opportunity to participate in a statewide survey, and provide/deny contact information for volunteer leaders. An email hyperlink to the Qualtrics<sup>TM</sup> qualification questionnaire was sent to each counties' Extension staff chairs and any staff listed with 4-H. Survey recruitment ended before Thanksgiving 2016, and survey disbursal began after the New Year to avoid the holiday season. Four weeks after survey distribution final attempts were made to remind participants to complete the survey, during which several Extension staff members felt they had already completed the survey. Upon further discussion, one staff member explained that he thought the pre-notice, thank you card and replacement survey were all in regard to the first survey, the qualification questionnaire, not the statewide survey. One staff member thought the survey was only designed for volunteer leaders. Some confusion did exist among recruited Extension staff.
- **5.** Five analyzed survey responses were incomplete, potentially due to survey length (22 pages) or technology issues in electronic formats.

#### **Reflexivity Statement**

In the nature of qualitative research, I will be responsible for recognizing my personal thoughts, interests, values and potential biases throughout the research process (Krathwohl, 2009). By disclosing and describing my personal factors, I, Fawn Kurtzo, the primary researcher,

will work to diminish my threats to the study and describe how I shape the direction of the study (Creswell, 2014; Krathwohl, 2009).

I was raised in a rural community nestled in the Ozark Mountains of Northwest Arkansas, alongside my two younger brothers. My family primarily raised produce, trained horses and provided seasonal help on local farms throughout my young childhood. I developed a stake in the equine industry at a young age when my mother included me in her business of riding colts and farrier work. When I got my license at 16 years old, I was able to serve the majority of her clientele. My first brother and I were competitive with our horse 4-H projects for the entirety of our adolescence and maintained officer positions in the local horse project 4-H club where our mother also served as the volunteer leader. I feel those experiences were the springboard of a successful professional career as an equine behavior specialist and farrier, which lasted nearly a decade as I travelled five states working in a variety of disciplines, breeds and conditions.

In 2013, I joined the University of Arkansas to study agricultural communications. I needed the competitive ability to promote my professional equine interests with aim to gain greater opportunities through new clientele. In previous college experiences, I managed schoolwork and business ventures; however, this time was different. I made the choice to forego my involvement in the equine industry to focus on pursuing a higher education. I spent two years working in a nearby theatre as a stagehand, parking assistant, facilities crew member, and communications assistant to the production office. I was offered the communications assistantship position with the dean's office of Dale Bumpers College of Agricultural, Food and Life Sciences the summer before undergraduate senior year. I fulfilled the graduate assistantship duties as an hourly employee during my final undergraduate year and immediately rolled over

into graduate school a few weeks after graduating with a Bachelor of Science in agricultural communications.

At the time of this research project, I was approaching 28 years old and have not been an active professional in the equine community for nearly four years. During my time at the university, my mother was a volunteer leader of the Newton County equine 4-H club and my second brother, age 15, was an active member. I seasonally attended club meetings and acted as a mentor to members and parents, photographed a community service project, and was a guest speaker at the 2016 Newton County 4-H Awards Banquet.

My personal investment in the equine and 4-H communities provided motivation throughout all phases of this research project. I sought to be honest and open minded while building instruments, collecting, and analyzing data. Guidance from prior research and experts in Extension and volunteerism fields provided foundational support for the studies. I dutifully pursued recruits and rapport stemmed from experiences with the equine industry, 4-H, and being native to the state. I was considerate of participants' busy schedules and sought to be prepared and professional during all interactions. It has been an immense honor to serve the communities and interests of the state.

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# Chapter 2

**Literature Review** 

#### The Cooperative Extension Service

Seaman Knapp, a cornerstone of non-formal agricultural education stated, "What makes a nation firm and great and wise is to have education percolate all through the people" (Seevers & Graham, 2012, p. 1). Knapp recognized the power of using demonstrations to educate farmers about new and improved practices in the late 1800s, and provided foundational support for the political, educational and social aspects of agricultural communities (Encyclopedia Britannica, 2014). Shortly after Knapp's lifetime of influence, the Smith-Lever Act of 1914 secured federal funding and cooperation between agriculture focused federal agencies, land-grant universities and field staff (Seevers & Graham, 2012), to better enable agricultural communities by 'taking the university to the people' through the Cooperative Extension System (Rasmussen, 1989, p. vii). The non-formal education system consists of *cooperative* action throughout the United Stated Department of Agriculture (USDA), National Institute of Food and Agriculture (NIFA), and Extension affiliates of land-grant universities, U.S. territories, and counties (Seevers & Graham, 2012). The extension of government entities and state institutions into the needs of communities is a public service courtesy of the unparalleled system of federal, state and local tutelage (Seevers & Graham, 2012).

#### The Structure of 4-H

The Cooperative Extension System quickly capitalized on an existing, effective channel among rural communities – 4-H clubs (Eddy, 1957). In the beginning, public school teachers provided opportunities for vocational education to increase interest in the future of rural living among youth through boys and girls clubs (Eddy, 1957). By 1914, clubs already adopted the four-leaf clover, were governed by organizational guidelines and were found to influence the agricultural practices of communities (Eddy, 1957). The Cooperative Extension System poured

into the youth, the result was described as "more spectacular growth than perhaps any other form of extension" (Eddy, 1957, p 135).

Modern 4-H clubs are guided by an intricate system of experts at the county, state and national level (see Figure 2.). At the local level, each county has a minimum of one county agent with 4-H responsibilities to aid volunteer leaders and parents with developing, conducting, and recognizing youth development efforts (Seevers & Graham, 2012).

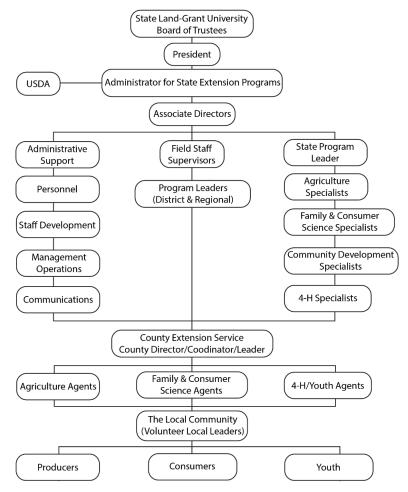


Figure 2. "Hypothetical organizational chart of the Extension Service." Reprinted from Education Through Cooperative Extension (3rd ed.) (p. 47), by B. Seevers, & D. Graham, 2012, Fayetteville, AR: University of Arkansas Bookstore.

# The Purpose of 4-H

The 4-H organization is currently nationwide and all efforts aim to help youth develop life skills to become accountable, dynamic members of society (Seevers & Graham, 2012). "Life skills' are defined as competencies that help people function in the environment in which they live" (Seevers & Graham, 2012. p. 84). Opportunities for youth to develop life skills include a variety of clubs, projects, school enrichment programs, camps, events, special interest groups, and broadcast outreach (Seevers & Graham, 2012).

#### 4-H Clubs

According to Seevers & Graham (2012), 4-H is most commonly associated with organized club efforts including multi-project clubs and single-project clubs. In both types of clubs, members elect officers, meet on a regular basis, and complete projects or activities alongside parents and volunteer leaders (Seevers & Graham, 2012). Multi-project clubs provide the opportunity for youth with a variety of interests to work in conjunction with each other; however, require abundant adult assistance and effort to coordinate as youths explore their interests (Seevers & Graham, 2012). On the other hand, single-project clubs focus on a single interest shared by all club members, and are easier for adults to manage (Seevers & Graham, 2012). Urban populations and modern technology have expanded 4-H project interests to include science, technology, engineering and math (STEM), healthy living, and citizenship (Clemson University, n.d.; National 4-H Council, 2016a). Although modern 4-H has many facets, all seek to fulfill the common mission. "...to empower youth to reach their full potential, working and learning in partnership with caring adults" (National Institute of Food and Agriculture, n.d., p. 2).

### **Volunteer Leaders of 4-H Clubs**

It has been described that 4-H programs would be non-existent without the aid of volunteer leaders as a foundational and economic necessity (University of Illinois Extension, 2016; Van Horn, Flanagan & Thomson, 1999). Volunteer leaders have been identified the "key to success" (Rasmussen, 1989, p 175). The Corporation for National and Community Service (n.d.), reported over 16 million volunteers in the educational or youth service segment in 2015 – roughly 47 billion dollars of service. Over 500,000 volunteers currently serve the 4-H organization (National 4-H Council, 2017). Volunteer leaders provide a variety of impacts including, economic support (Hutchins, Seevers, & Leeuwen, 2002), youth development (Seevers & Graham, 2012), program innovation (Culp & Schwartz, 1998) and the arm of community outreach unsustainable for Extension staff alone (Graham, Arnold, & Jayaratne, 2016, p. 51).

## Volunteer leader impact on youth development.

The National 4-H Council (2016b) outlined that volunteers have the capacity to influence the progressive growth of youth by: 1) developing life skills and leadership skills, 2) understanding ages and stages of youth development, 3) empowerment of others, 4) practicing youth – adult partnerships, 5) ability to motivate and encourage youth, and 6) appreciating diversity. Youth's exposure to adult mentoring of programs provides them with an enhanced ability to succeed in life (Division of Agriculture, 2016b).

Radhakrishna and Ewing (2011) performed a descriptive-correlational research study polling 378 4-H leader volunteers in Pennsylvania to "assess volunteer leader competencies and their relationships with life skills youth learn in 4-H" (para. 6). In this study, volunteer leaders described noteworthy associations between their levels of competency and the life skills youth

acquire through 4-H such as skills, belonging, mattering and structure (Radhakrishna & Ewing, 2011).

# Volunteer leader support.

The imperative need for volunteer leaders has encouraged researchers to explore leaders' sources of motivation (Culp, 2013a; Schmeising, Soder, & Russell, 2005; Schrock & Kelsey, 2013; Washburn, Cornell, Traywick, Felix & Phillips, 2015), factors related to retention (Adams, Mazzella, Renfro, Schilling, & Hager, 2016; Lobley, 2008; Vettern, Hall & Schmidt, 2009; White & Arnold, 2003), and opportunities for professional development (Arnold, Dolenc, & Rennekamp, 2009; Robideau & Vogel, 2014; Sinasky & Bruce, 2007; VanWinkle, Busler, Bowman, & Manoogian, 2002;).

Previous measures taken to supplement needs of volunteer leaders include, providing training at optimum times (Kaslon, Lodl, & Greve, 2005), providing training through multiple mediums (Cavinder, et al., 2009), improving leaders' teaching capacity (Cavinder, Antilley, Gobbs & Briers, 2009), providing supplemental information (Rusk, Kerr, Talbert, & Russell, 2001), and tailored communication practices (Cottle & D'Angelo, 2015; Fox, Hebert, Martin & Bairnsfather, 2009). Previous research shows that volunteer leaders prefer multi-level-training, with feedback and recognition for completion at each level (Bailey, Waite, & Wilson, 2013; Wise & Ezell, 2003).

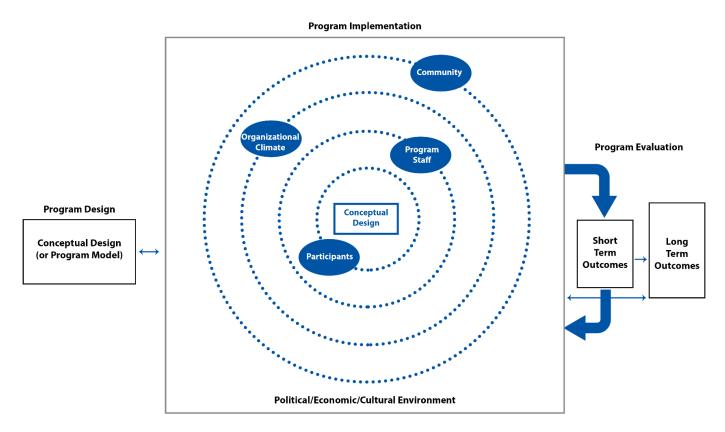
Previous research has illustrated the need for expansion of volunteer leader based studies. One descriptive study surveyed county agents associated with 4-H programs in Tennessee and found a need for "informational needs assessments" among 4-H volunteers to develop improved support and management of volunteer leaders (Casteel, 2012, p. 5). Singletary, Smith, and Evans (2006), recommended duplicating their statewide survey focusing on the "influence of perceived"

4-H volunteer leader skills on the like skills 4-H youth learn" (para. 16). Radhakrishna and Ewing (2011) outlined that an assessment regarding volunteer leaders' proficiencies should be performed periodically.

Prior research also advises Extension professionals to examine the needs and abilities of volunteer leaders to evaluate program delivery (Boyd, 2004; Casteel, 2012; Culp, 2013b; Kempton, 1980).

### **Theoretical Frameworks**

The Implementation Issues Framework (IIF) provides a contemporary view of actual program implementation (Abell et al., 2015). Illustrated in figure 3, the program design begins as a stand-alone set of constructs, which is then applied within the forces of participants, program staff, organizational climate and community (Abell et al., 2015). Spherical models illustrate the magnitude and presence of influential factors on the inputs, outputs and outcomes of a program model, as well as the levels of effect a program model can generate. (Abell et al., 2015).



*Figure 3.* The Implementation Issues Framework upholds specific consideration of social factors that affect program implementation practices, and consequently, program outcomes. Reprinted from "A framework for identifying implementation issues affecting extension human sciences programming" by E. Abell, R. Cummings, A. M. Duke, & J. W. Marshall, (2015), *Journal of Extension*, 53(5).

Abell and colleagues (2015) argued that inputs and outputs recognized within logic models are based on the assumption the model will be executed exactly as planned; this model seeks to capture the essence of "real-world issues" that affect implementation of a program model (para. 1). The IFF is founded on research needs and implementation factors identified within the human sciences field of Extension, and resembles the tendencies of Bronfenbrenner's ecological systems theory of human development (McLeroy, Bibeau, Steckler & Glanz, 1988; Tregaskis, 2015). The four spheres of the IIF model illustrate the influence of participants, program staff, organizational climate and community on the actual inputs, outputs and outcomes of a program design (Abell et al., 2015). "In accepting that programs are influenced by an interconnected system of influences, the IIF becomes a tool to organize and inform reasoned adjustments to program inputs and outcomes" (Abell et al., 2015, para. 25). Overall, the IIF places significant importance on conditions in communities and throughout organizational structures in fulfilling program inputs, outputs and outcomes. According to Abell et al. (2015), "the IIF can serve as an aid in program planning with respect to the analysis of the issues that could support or potentially interfere with the implementation of a program. In addition, given that efforts to replicate successful Extension programs in one or more locations are common, the IIF can be used to guide planning and problem-solving related to factors that may differ from the original implementation context" (para. 25). Arkansas' horse 4-H program efforts are implemented repetitively in a variety of locations throughout the state.

Communication practices have been discussed in elements of Extension program dissemination (Licht & Martin, 2007), adoption (Amend, 1984), and preservation (Berlo, 1975). The internal flow of information has been described as "particularly troublesome" for Extension staff that span broad geographic areas and can be improved through strategic review (Weigel, 1994).

Illustrated in Figure 4, the Source-Message-Channel-Receiver (SMCR) Model of Communication (1960) details an intricate network of encoding and decoding information between sources and receivers. The Implementation Issues Framework (Abell, et al., 2015), and Source-Message-Channel-Receiver model of communication (Berlo, 1960), guided this study.

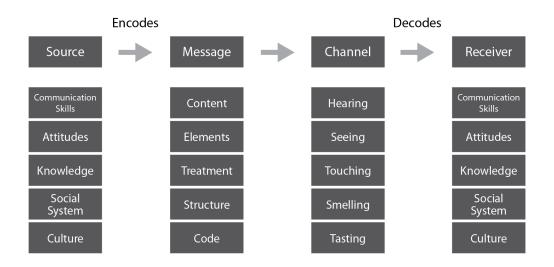


Figure 4. Berlo's (1960) Source-Message-Channel-Receiver Model of Communication. Developed from *Process of communication: An introduction to theory and practice*, by D. K. Berlo, 1960, New York: Holt, Rinehart and Winston.

## **Call for Evaluations**

As expressed in the IFF, and SMCR models, the success of an organized effort lies largely in the awareness of associated influences, practices, and outcomes (Borden, Perkins, & Hawkey, 2014). Existing programs can be reviewed through both formative and summative evaluation methods. In the *Handbook of Practical Program Evaluation*, editors Wholey, Hatry and Newcomer (2010), explain formative evaluations seek to improve program delivery, whereas summative evaluations focus on program outcomes.

In the nature of 4-H programs, formative evaluations, also referred to as assessments, have commonly focused on the needs of volunteers (Bechtel, Ewing, Threeton, & Mincemoyer, 2013; Cook, Kiernan, & Ott, 1986; Culp, Edwards, & Jordan, 2015; Culp, McKee, & Nestor, 2007; Stevenson et. al., 2011), and the needs of volunteer managers (Boyd, 2004; Casteel, 2012; Seevers, Baca, & Leeuwen, 2005). The targeted assessment of program faciliators reflects the importance of understanding factors associated with program implementation, as expressed by prior research (Abel et al., 2015; Bush, Mullis, & Mullis, 1995; Decker, 1990; Duerden & Witt, 2012; Rennekamp & Arnold, 2009).

Although reviewing program implementation is critically linked to program outcomes (Arnold, 2011), the sole review of program outcomes is far more popular among Extension professionals (Rennekamp & Arnold, 2009). For example, studies within 4-H programs can be identified highlighting youth life skill outcomes (Anderson & Kar-Lillienthal, 2011; Arnold & Nott, 2010; Beck, Rayfield, Flowers, & Jones, 2010; Cole, 2005; Fitzpatrick, Gagne, Jones, Lobley, & Phelps, 2005; Saunders-Ferguson, Barnett, Culen, and TenBroeck, 2008; Nadeau, Alger, & Hoagland, 2007; Nadeau, Alger, Hoagland, & Chameroy, 2004; Pendry & Roeter, 2011; Pendry, Roeter, Smith, Jacobson, & Erdman, 2013), volunteer leader training outcomes (Bailey, Waite, Wilson, 2013; Flage, Hvidsten, Vettern, 2012; Culp, Hance, Reynolds, & Bentley, 2016; Schmitt-McQuitty, Smith, & Young, 2011; VanWinkle, Busler, Bowman, & Manoogian, 2002), measuring community impacts (Merten, Locke, Williams, Carter, & Lehman, 2014; Lerner, Lerner, Phelps & Colleagues, 2009, p. 23; National 4-H Council, 2013), and measuring economic impact (Harder & Hodges, 2011).

Summative evaluations are popular because reported impacts provide leverage for financial investment at the federal and state level (Merten, Williams, Carter, & Lehman, 2014)

and personal investment of volunteer leaders (Arnold, Dolenc, & Rennekamp, 2009; Cleveland & Thompson, 2007). Secondly, Homan, Dick and Hedrick (2007) noted, "for 4-H to remain an active and relevant youth development experience, we need to be cognizant of how youth perceive 4-H" (para. 1). Meanwhile, parents face an increasing number of choices and hurdles related to extra-curricular activities, to which evaluations have been suggested as a pivotal tool to illustrate how 4-H programs are "meaningful investments" for youth (Hedrick, Homan, & Dick, 2009, para. 20).

## Impacts on youth participation rates.

Van Horn, Flanagan, and Thomson (1999), reported other youth activities and organizations are in competition with 4-H such as scouts, YWCA and YMCS, and Little League. Modern research show an increasing number of extra-curricular activities compete for youth's time (Cassels, Post, & Nestor, 2015; Hamilton, Northern, & Neff, 2014; Hedrick, Homan, & Dick, 2009; Phelps, Henry, & Bird, 2012). As youth reach adolescence they often seek new interests, which can negatively affect enrollment (Harder, Lamm, Lamm, Rose, & Rask, 2005). The challenge to attract youth is compounded by rising social issues such as differences in socioeconomic status, parental education, and levels of community support (Snellman, Silva, Fredrick, & Putnam, 2015).

# **Horse 4-H Programs**

Youth in all 50 states have an interest in horses, as evidence of a horse 4-H program is identifiable through the websites of all respective Universities and Extension services. Previous studies have been conducted throughout the United States to highlight the life skill outcomes associated with horse 4-H programs. In Oregon, 156 youth whom experienced a majority of four to six years' commitment with a horse project participated in a statewide survey focused on

describing the impact of the state horse 4-H program on the youth's life skills (Arnold & Nott, 2010). The research noted "developing empathy for animals," "developing a passion for something", and "developing confidence" as the greatest life skill gains (Arnold & Nott, 2010, p. 16). According to Arnold and Nott (2010), "[g]oal commitment, competence, responsibility, and cooperation also were ranked highly" (p. 16). Horse projects are not limited to riding and handling activities, they can also include non-riding activities such as public speaking, knowledge and science based quiz bowls and judging (Division of Agriculture, 2011). Nebraska Extension horse specialist, Anderson, and Companion Animal Specialist, Kar-Lillienthal, found that non-riding horse-related competitions had an affirmative influence on handling pressure, respecting officials, sportsmanship, goal setting, self-motivation and leadership among at least 37 participants (86%) in the Nebraska 4-H Horse Stampede, single-day event (Anderson & Kar-Lillienthal, 2011). A Florida study conducted by Saunders-Ferguson, Barnett, Culen, and TenBroeck (2008) sampled 120 4-H members, ages 12-18, who attended a horsemanship school in the state and found a parallel between youth's personal horsemanship attributes and levels of self-esteem. It was evident that with higher levels of horsemanship skill came higher levels of self-esteem (Saunders-Ferguson et al., 2008). A collaborative research effort in Washington found significant increases in positive behaviors of 64 horse-novice youth (mean age 10.93) years), after participation in an 11-week equine interaction program (Pendry, Roeter, Smith, Jacobson, & Erdman, 2013). An experimental study was conducted in New Jersey to measure the differences between learning life skills through long-term (26 weeks) participation in a 4-H horse program versus short-term (6 weeks) participation in a Boys and Girls Club Summer Day Camp among at-risk youth (ages 12-18) (Cole, 2005). Both tracts equally utilized the Life Skills Component; however, the horse program met on the farm one day a week to work directly with

horses (Cole, 2005). At the conclusion of the treatment, participants of the Boys and Girls Club self-reported improvement in anger management and leadership, and members of the horse program self-reported improvement in anger management, leadership, self-awareness, problem solving, interpersonal skills and workplace skills (Cole, 2005). Six months after the conclusion of the study, all horse-program participants were still enrolled in school – they were able to overcome the 18.9% school dropout rate of the surrounding area (Cole, 2005). A team of researchers from Washington studied the unique interaction-medium horse subjects provide youth to gain insight on verbal and non-verbal communication due to the predator-prey relationship (Pendry & Roeter, 2011).

# The Arkansas Horse 4-H Program

In March 2016, Arkansas had 922 youth, ages 5-19, enrolled in horse 4-H projects; these participants comprise roughly 7 percent of the total population (13,116) of active, enrolled 4-H members in the state (N. Washburn, personal communication, March 8, 2016). Horse clubs have experienced a 75 percent overall increase in participation over the past five years, according to the state 4-H horse show participation rate (M. Russell, personal communication, March 8, 2016). Horses are a popular commodity throughout the state and attract revenue from a widevariety of enthusiasts (Division of Agriculture, 2016; Division of Agriculture, 2016c; Nexstar Broadcasting, Inc., 2013). According to the Arkansas Division of Agriculture (2016b), 60,000 households have horses in the state; therefore, roughly 5 percent of Arkansans are horse owners (Suburban Stats, 2016). The Arkansas horse industry estimated to generate \$3.5-billion-dollars (Division of Agriculture, 2016b). In 2009, a central Arkansas news team reported the horse industry to generate approximately 40,000 Arkansas jobs while featuring b-roll of the state 4-H horse show where thousands of people and nearly 500 horses had gathered (Nexstar

Broadcasting, Inc., 2013). In 2014, the state 4-H horse show attracted the most competitors since 2009, and 2015 followed suit (Russell, M., 2014; Russell, M., 2015). In addition to competitive opportunities, the Arkansas Division of Agriculture and state equine specialist host a wide variety of camps and programs throughout the state including the following: high adventure horse packing training, spring and summer equine camps, one-day equine judging camps, and addressing any specific needs reported by county agents and/or volunteer leaders (Division of Agriculture, 2016a; M. Russell, personal communication, February 2, 2016; M. Russell, personal communications, March 8, 2016). According to the state equine specialist, Arkansas' horse 4-H program has expressed a growing trend in popularity and many opportunities would not be possible without the contributions of volunteers (M. Russell, personal communication, March 8, 2016). As of February 2015, no formal research efforts had been conducted within the Arkansas horse 4-H program since its formation (M. Russell, personal communication, March 8, 2016).

# **Summary**

The turn of the Twentieth Century brought increased efforts to enable the American farm communities by "taking the university to the people" through the Cooperative Extension System (Rasmussen, 1989, p. vii). The non-formal educational effort among federal, state and local experts provided educational material and experiences to local communities, including the youth 4-H organization (Eddy, 1957). The 4-H organization grew from vocational activities provided by schoolteachers (Eddy, 1957) into a nationally recognized effort to improve the lives of young people through experiential learning tailored to their interests and developmental needs (Seevers & Graham, 2012). The service provided by caring adult volunteers constitutes the success of 4-H programs (National Institute of Food and Agriculture, n.d.), and is widely recognized among club activities (Seevers & Graham, 2012).

Volunteer leaders serve as the implementers of 4-H curriculum and provide community outreach beyond the capacity of Extension staff (Graham, Arnold, & Jayaratne, 2016, p. 51). Therefore, special attention is provided to the recruitment (Culp, 2013a), development (Arnold, Dolenc, & Rennekamp, 2009), and retention associated with volunteer leaders (White & Arnold, 2003).

In addition to managing volunteers, researchers support considering additional social factors that may be present during program implementation (Abell et al., 2015; Arnold, 2011). The IIF model illustrates the compounding effects participants, program staff, organizational structure and communities may present during program implementation (Abell et al., 2015). The social nature of Extension programming requires adept communication practices to navigate diverse stakeholder audiences. Berlo's SMCR Model of Communication (1960) outlines the wide variety of factors involved with sharing, receiving and interpreting information. Although the IFF and SMCR models focuses on a different components associated with Extension programming, each contribute to the need for comprehensive understanding of a program (Borden, Perkins, & Hawkey, 2014).

Awareness of factors associated with a program generate the capacity to utilize evaluation practices to (a) improve program delivery and (b) measure program outcomes (Wholey, Hatry, & Newcomer, 2010). Extension professionals are most familiar with measuring program outcomes through summative evaluation (Rennekamp & Arnold, 2009) to increase stakeholder support at organizational (Merten, Williams, Carter, & Lehman, 2014) and personal levels (Cleveland & Thompson, 2007; Hedrick, Homan, & Dick, 2009). However, formative evaluations to review program implementation have been described as a modern necessity

among youth development programs (Arnold, 2011) as youth retention is challenged by a growing number of extracurricular activities (Cassels, Post, & Nestor, 2015).

Prior research has shown that youth develop higher levels of compassion (Arnold & Nott, 2010, p. 16), self-motivation (Anderson & Kar-Lillienthal, 2011), self-esteem (Saunders-Ferguson, Barnett, Culen, & TenBroeck, 2008), and perception on non-verbal communication (Pendry & Roeter, 2011) from participating in horse 4-H activities. However, the Arkansas horse 4-H program struggles to maintain members as they reach adolescence (M. Russell, personal communication, March 8, 2016).

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Chapter 3

Article 1

# Straight from the Horse(man)'s Mouth: Innovative 4-H Camps

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## **Background**

One in five Arkansas households owns at least one horse (Division of Agriculture, 2016). In early spring 2016, Arkansas had 922 youths, aged 5-19, enrolled in horse 4-H projects; these participants comprise roughly 7% of the total population of enrolled 4-H members in the state (4-H Online Enrollment, 2016). Since 2010, the state 4-H horse show has become increasingly popular for youths (Russell, 2015), yet the horse 4-H program is facing the national battle of losing members as they approach adolescence (Defore, Fuhrman, Peake, & Duncan, 2011; Seevers & Graham, 2012). Currently, many members lack proper horsemanship, a situation that contributes to an overall frustration with horse projects, adding to the growing drop-out rate for horse 4-H clubs. In response to these issues, fee-based horse camps were developed via a statewide initiative (Cochran, Ferrari, & Arnett, 2014) and were specially designed by the state equine specialist to incorporate a wide breadth of resources and strategies. A spring break horse 4-H camp was first developed in 2010, and a growing participation rate necessitated the addition of a summer horse 4-H camp in 2013; both camps involve similar curricula and have been dually offered since 2013.

### **Purpose of the Camp**

Goals of the horse 4-H camps include providing Arkansas horse 4-H club members with expert guidance and, ultimately, increase members' desire to continue involvement with horse projects. The following objectives guide camp activities:

- 1) Increase knowledge of horsemanship principles related to the horse 4-H program.
- 2) Increase knowledge of safety practices related to the horse 4-H program.
- 3) Provide youths with applicable resources to decrease challenges with their horse projects.

# Design and Implementation of Horse 4-H Camp Curriculum

Camp developers found benefit in using a pragmatic logic model as a framework for formulating curriculum, recruiting volunteers, recruiting participants, and, for the summer camp of 2016, determining areas of impact through goal-based evaluation (see Figure 1) (Futris & Schramm, 2015; Rennekamp & Arnold, 2009; Rennekamp & Engle, 2008).

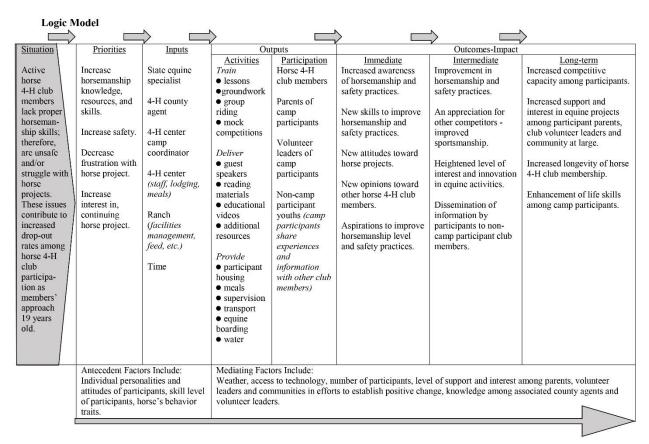


Figure 1. Arkansas horse 4-H camp logic model.

The state equine specialist primarily manages horse 4-H camps with heavy assistance by a county agent and the 4-H Center camping coordinator. Program curriculum is implemented by the state equine specialist, county agents with a personal investment in the equine industry, the

Arkansas 4-H Center, Diamond TR Ranch, and a wide variety of volunteer equine experts. The target audience includes all current members of Arkansas horse 4-H clubs, aged 12-19, with riding experience and a horse that can be delivered to and from Diamond TR Ranch. During the 2016 summer horse 4-H camp, participants were exposed to equine professionals from a variety of backgrounds such as: collegiate equestrian teams, horsemanship, speed, performance, English, and ranch style riding. Most activities were conducted in small groups and led by one or two volunteer experts. One camp highlight included a field trip to a nearby thoroughbred breeding farm and specialized wound care research center. The participants were transported to Diamond TR Ranch each morning to engage in horse activities and from the ranch to the 4-H Center located near Little Rock, Arkansas, each evening for meals and lodging – a distance of roughly 30 miles. Transportation was provided by the 4-H Center. While the campers were at the 4-H Center, their evening activities included swimming, canoeing, making s'mores, and watching the film *Unbranded*. The 4-H Center camping coordinator was responsible for the activities and care of camp participants throughout their duration at the 4-H Center. The camp participants (n = 15) were from nine counties throughout the state (see Figure 2).

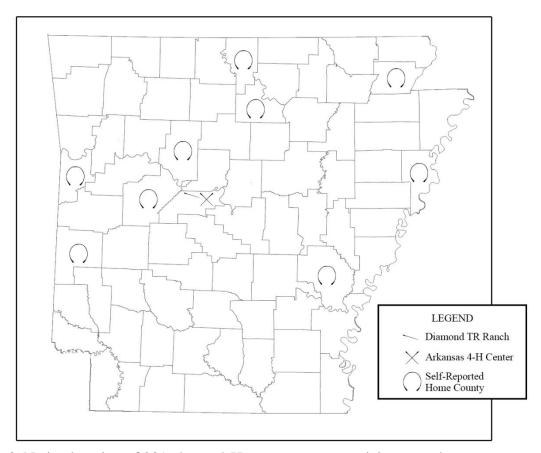


Figure 2. Native location of 2016 horse 4-H summer camp participants and venues.

# **Evaluation Design**

Participants' perceptions of the camp experience provided a measurement for the program's effectiveness and impact. Kirkpatrick's (1998) model guided daily field observation and pre- and post-test questionnaires and allowed the flexibility to tailor question content directly to camp curriculum and atmosphere through the four major content areas of the model: (a) learners' reactions, (b) learning, (c) behaviors, and (d) overall results of a program. The purpose of using this framework was to fulfill the camp coordinator's desire for program accountability, enhancement of services to participants, and increased recruitment of all stakeholders (Arnold & Cater, 2016; Bennett, 1975; Diem, 2003; Lekies & Bennett, 2011).

## **Impact**

Average group scores on questionnaires reflected interactions with equine experts enhanced participants' horsemanship skills, decreased unsafe practices and increased youths desire to continue investing time with equine projects. Group averages in nearly all content areas were above the median level on Likert-type scales. Scores in horsemanship etiquette and safety increased by 22%; aspirations to seek magazines and training videos were expressed by 53% and 47% of respondents, respectively. Confidence levels increased in 70% of horsemanship skill areas (e.g. riding with a group of people, staying balanced while riding), and nearly all participants aspired to recommend that other horse 4-H members attend the 2017 summer camp. The vast majority of responses were above the "undecided" or "sometimes" descriptors; however, some decreases in posttest data did exist. Data trends illustrated that older participants and those with fewer years' equine experience completed camp feeling less confident about completing equitation patterns. Recommendations include making a more consistent impact in the diverse population by utilizing older participants in leadership roles (Hamilton, Northern, & Neff, 2014) and tailoring the educational components to participants' ages and/or riding levels, rather than focusing on group activities (Harder, Lamm, Lamm, Rose, & Rask, 2005).

#### Conclusion

Establishment of the horse 4-H camps was a creative response to a specific need in the Arkansas youth population (Seevers & Graham, 2012). The results of the 2016 summer camp evaluation were developed into a report and condensed into a vignette for key stakeholders. The vignette illustrated the significant findings of the study and included photographs of camp activities. This communication piece aims to increase motivation, participation, and retention of expert volunteers. Aligned with the expressed concern of Borden, Perkins, and Hawkey (2014),

the multiphase evaluation was designed to be innovative and provide camp coordinators insight on the target population's needs. For more information about the evaluation practices or instruments, please contact the Arkansas equine specialist, Mark Russell.

### **Abstract**

As 4-H evolves to include a wide breadth of youth's modern interests, innovative educational opportunities and evaluation practices become necessary. Horsemanship and safety-based horse camps were developed in response to a statewide challenge to develop competitive 4-H members and retain those members as they approach adolescence. The article describes the development, implementation, and review of Arkansas's horse 4-H camps. Results include a practical example of Kirkpatrick's Model (1998) in practice and a goal-based evaluation leading to future modifications in the program.

# **Keywords**

4-H camp, evaluation, horse, innovative, Kirkpatrick's evaluation model

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**Article 1: Appendices** 

Article 1: Appendix A

IRB Approval



NACRACID A NIDLINA

Office of Research Compliance Institutional Review Board

October 26, 2016

IVIEIVIORANDOIVI	
TO:	Fawn Kurtzo Leslie Edgar Mark Russell Donna Graham
FROM:	Ro Windwalker IRB Coordinator
RE:	PROJECT MODIFICATION
IRB Protocol #:	16-05-754
Protocol Title:	Knowledge, Perceptions and Attitudes of the Arkansas Equine 4-H Program
Review Type:	☐ EXEMPT ⊠ EXPEDITED ☐ FULL IRB
Approved Project Period:	Start Date: 10/24/2016 Expiration Date: 05/30/2017
Variation and the model of the referenced nucleus has been approved by the IDD. This wastered in	

Your request to modify the referenced protocol has been approved by the IRB. This protocol is currently approved for 240 total participants. If you wish to make any further modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

Please note that this approval does not extend the Approved Project Period. Should you wish to extend your project beyond the current expiration date, you must submit a request for continuation using the UAF IRB form "Continuing Review for IRB Approved Projects." The request should be sent to the IRB Coordinator, 109 MLKG Building.

For protocols requiring FULL IRB review, please submit your request at least one month prior to the current expiration date. (High-risk protocols may require even more time for approval.) For protocols requiring an EXPEDITED or EXEMPT review, submit your request at least two weeks prior to the current expiration date. Failure to obtain approval for a continuation on or prior to the currently approved expiration date will result in termination of the protocol and you will be required to submit a new protocol to the IRB before continuing the project. Data collected past the protocol expiration date may need to be eliminated from the dataset should you wish to publish. Only data collected under a currently approved protocol can be certified by the IRB for any purpose.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.

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The University of Arkansas is an equal opportunity/affirmative action institution.

Article 1: Appendix B.

Consent Form

## **Consent to Participate in Research**

Study Title: Knowledge, Perceptions and Attitudes of the Arkansas Equine 4-H Program

**Researchers:** Fawn Kurtzo (University of Arkansas), Dr. Mark Russell (U of A Division of Agriculture) and Dr. Leslie Edgar (University of Arkansas)

Please read this consent document carefully before you decide to participate. Your child's participation is completely voluntary.

**Purpose:** The purpose of this study is to provide an analysis of the Arkansas equine 4-H program according to county agents, volunteer leaders, parents of active club members and active club members.

**Procedures/Tasks:** The observer will utilize a field observation guide to provide a thick description of participant reactions to activities, document significant events and emergent themes. Observation will occur throughout all equine-related activities. Youth questionnaires will consist of quantitative components. Paper pretests will be administered prior to camp activity on the first day, and paper posttests will be administered after the completion of camp activity on the final day. Questionnaire results will measure participant's knowledge, aspirations, skills and attitudes experienced through the summer camp.

**Duration:** The survey will take approximately 15 minutes each time, and will be administered twice.

**Risks and Benefits:** There are no anticipated risks to participating in this study. Benefits include, but are not limited to: improvements in program curriculum, increased support among stakeholders and insight for other equine 4-H programs throughout the nation.

**Confidentiality:** Participant responses will be kept confidential and all data will be stored on a password protected computer. Observation notes will be stored in a locked file located on the researcher's desk. No participants will be mentioned in the research findings.

**Incentives:** No incentives provided, but we do appreciate your insights.

**Participant Rights:** Participants may refuse to participate in this study without penalty or loss of benefits to which they are otherwise entitled. If you choose to allow your child to participate in the study, the child may discontinue participation at any time without penalty or loss of benefits. By signing this form, participants do not give up any personal legal rights they may have as parent/legal guardian of the participant in this study.

Contacts and Questions: For questions, concerns, or complaints about the study you may contact Dr. Leslie Edgar at (XXX) XXX-XXXX, ledgar@uark.edu or Dr. Mark Russell at (XXX) XXX-XXXX, mrrussell@uaex.edu. For questions about one's rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ro Windwalker, the University of Arkansas' Compliance Coordinator, at (XXX) XXX-XXXX or email irb@uark.edu.

## Signing the consent form

The parent/legal guardian has read (or someone has read it to them) this form and	l agrees to allow their
child (name) to participate in the research study. Bo	oth parent/legal guardian
and child have had the opportunity to ask questions and have had them answered	to their satisfaction. The
parent/legal guardian and youth participant voluntarily agree to participate in this	study with the
knowledge that responses will be used to gain a deeper understanding of summer	camp outcomes and
enhance planning of future equine 4-H camps.	
Signature of Parent/Legal Guardian:	Date:
Printed Name of Parent/Legal Guardian:	
Signature of Youth Participant:	Date:
Printed Name of Youth Participant:	-
Signature of Person Obtaining Consent:	Date:
Printed Name of Person Obtaining Consent:	_



Article 1: Appendix C.

**Evaluation Pretest** 

Respondent Number
-------------------

<u>Question 1</u>
Please circle the number to indicate your level of agreement with the options to complete the statement.

I learn about 4-H competitions, camps and other activities through:	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Social media	1	2	3	4	5
Websites	1	2	3	4	5
My county extension agent	1	2	3	4	5
My club leader	1	2	3	4	5
Parents	1	2	3	4	5
Friends	1	2	3	4	5
Other (please specify on blank)	1	2	3	4	5

Question 2
Please circle the number to indicate your level of agreement with the options to complete the statement.

I think I will enjoy this camp because:	Never	Rarely	Sometimes	Often	Always
I get to take my horse	1	2	3	4	5
I will get one-on-one instruction	1	2	3	4	5
I will fix a problem	1	2	3	4	5
I will get new ideas to try at home	1	2	3	4	5
I will become more competitive at events	1	2	3	4	5
Other (please specify on blank)	1	2	3	4	5

 $\frac{\textbf{Question 3}}{\textit{Please circle the number to indicate your level of agreement with the options to complete}}$ 

I typically solve behavior problems with my horse by:	Never	Rarely	Sometimes	Often	Always
Working with my club leader	1	2	3	4	5
Working with someone other than my club leader	1	2	3	4	5
Reading magazines	1	2	3	4	5
Watching training videos	1	2	3	4	5
Asking my county agent	1	2	3	4	5
Other (please specify in blank)	1	2	3	4	5

 $\frac{\textbf{Question 4}}{\textit{Please circle the number to indicate your level of agreement with the options to complete}}$ the statement.

I feel confident in:	Never	Rarely	Sometimes	Often	Always
Staying balanced while riding	1	2	3	4	5
Saddling my horse	1	2	3	4	5
Loading my horse	1	2	3	4	5
Clipping my horse	1	2	3	4	5
Picking up my horse's feet	1	2	3	4	5
Riding with a group of people	1	2	3	4	5
Completing speed patterns	1	2	3	4	5
Completing equitation patterns	1	2	3	4	5
Developing a feed ration for my horse	1	2	3	4	5
Understanding different bits and their uses	1	2	3	4	5

## Youth Summer Camp - Pretest Questionnaire

## **Question 5**

Please circle your answer that is most accurate in the following statements:	True	False	Don't Know
I should pass oncoming riders in the arena left-hand to left-hand.	True	False	Don't Know
A horse can't see an object closer than 4 feet in front of its face.	True	False	Don't Know
It is okay to tie a horse so that its head can reach the ground.	True	False	Don't Know
A horse should be tied in a quick release knot.	True	False	Don't Know
When wearing a helmet, chin straps are optional according to 4-H showing guidelines.	True	False	Don't Know
Saddles only need to be cleaned and oiled before shows.	True	False	Don't Know

## Question 6

Please circle your answer to the following statements:	True	False	Don't Know
When catching a horse, I should not approach at the hip.	True	False	Don't Know
It is acceptable to tie my horse with the lead rope long enough for him to reach the ground.	True	False	Don't Know
It is okay to tie my horse with the bridle reins.	True	False	Don't Know
It is acceptable to clean and oil my tack less than once a year.	True	False	Don't Know
Lime should be applied to wet spots in stalls.	True	False	Don't Know
While riding cues should start with the rider's hands then move to the riders legs if the horse doesn't respond to the hands.	True	False	Don't Know
While riding a horse, if it runs away, screaming will make it stop.	True	False	Don't Know
A rider's heels should always be down.	True	False	Don't Know
Riding with a deep seat helps a horse maintain collection.	True	False	Don't Know

## Youth Summer Camp - Pretest Questionnaire

#### **Ouestion** 7

**Question 8** 

To what extent do you agree or disagree with each of the following statements.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Improving my horsemanship will increase my competitive edge.	1	2	3	4	5
Improving safety practices will make equine activities more enjoyable.	1	2	3	4	5
Learning new training methods is helpful.	1	2	3	4	5
Being frustrated with my horse project will cause me to stop participating in the equine 4-H club.	1	2	3	4	5
Sharing new knowledge about horsemanship and safety skills is enjoyable.	1	2	3	4	5

Age:			
Gender (circle one)	Male	Female	Prefer not to provide
County:			
I have been an active	4-H memb	er since:	(year)

I have had an equine project since: \_\_\_\_\_(year)

Thank You!



Article 1: Appendix D

**Evaluation Posttest** 

Respondent Number	•

 $\frac{\textbf{Question 1}}{\textit{Please circle the number to indicate your level of agreement with the options to complete}}$ 

I have enjoyed this camp because:	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
I got to take my horse	1	2	3	4	5
I received one-on-one instruction	1	2	3	4	5
I fixed a problem	1	2	3	4	5
I have new ideas to try at home	1	2	3	4	5
I will become more competitive at events	1	2	3	4	5
Other (please specify on blank)	1	2	3	4	5

### **Question 2**

Please circle the number to indicate your level of agreement with the options to complete the statement.

In the future I plan to solve behavior problems with my horse by:	Never	Rarely	Sometimes	Often	Always
Working with my club leader	1	2	3	4	5
Working with someone other than my club leader	1	2	3	4	5
Reading magazines	1	2	3	4	5
Watching training videos	1	2	3	4	5
Asking my county agent	1	2	3	4	5
Other (please specify in blank)	1	2	3	4	5

 $\frac{\textbf{Question 3}}{\textit{Please circle the number to indicate your level of agreement with the options to complete}}$ the statement.

I feel confident in:	Never	Rarely	Sometimes	Often	Always
Staying balanced while riding	1	2	3	4	5
Saddling my horse	1	2	3	4	5
Loading my horse	1	2	3	4	5
Clipping my horse	1	2	3	4	5
Picking up my horse's feet	1	2	3	4	5
Riding with a group of people	1	2	3	4	5
Completing speed patterns	1	2	3	4	5
Completing equitation patterns	1	2	3	4	5
Developing a feed ration for my horse	1	2	3	4	5
Understanding different bits and their uses	1	2	3	4	5

## Question 4

Please circle your answer to the following statements:	True	False	Don't Know
I should pass oncoming riders in the arena left-hand to left-hand.	True	False	Don't Know
A horse can't see an object closer than 4 feet in front of its face.	True	False	Don't Know
It is okay to tie a horse so that its head can reach the ground.	True	False	Don't Know
A horse should be tied in a quick release knot.	True	False	Don't Know
When wearing a helmet, chin straps are optional according to 4-H showing guidelines.	True	False	Don't Know
Saddles only need to be cleaned and oiled before shows.	True	False	Don't Know

## Youth Summer Camp - Posttest Questionnaire

#### **Question 5**

Question 5			
Please circle your answer to the following statements:	True	False	Don't Know
When catching a horse, I should not approach at the hip.	True	False	Don't Know
It is acceptable to tie my horse with the lead rope long enough for him to reach the ground.	True	False	Don't Know
It is okay to tie my horse with the bridle reins.	True	False	Don't Know
It is acceptable to clean and oil my tack less than once a year.	True	False	Don't Know
Lime should be applied to wet spots in stalls.	True	False	Don't Know
While riding cues should start with the rider's hands then move to the riders legs if the horse doesn't respond to the hands.	True	False	Don't Know
While riding a horse, if it runs away, screaming will make it stop.	True	False	Don't Know
A rider's heels should always be down.	True	False	Don't Know
Riding with a deep seat helps a horse maintain collection.	True	False	Don't Know

### **Question 6**

To what extent do you agree or disagree with each of the following statements.	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Improving my horsemanship will increase my competitive edge.	1	2	3	4	5
Improving safety practices will make equine activities more enjoyable.	1	2	3	4	5
Learning new training methods is helpful.	1	2	3	4	5
Being frustrated with my horse project will cause me to stop participating in the equine 4-H club.	1	2	3	4	5
Sharing new knowledge about horsemanship and safety skills is enjoyable.	1	2	3	4	5

### **Question** 7

Please circle the number to indicate your level of agreement with the following statements:.	No	Maybe	Yes	I already have
I will share my experience at camp with my club leader.	1	2	3	4
I will share my experience at camp with other club members.	1	2	3	4
I will share my experience at camp with my friends.	1	2	3	4
I will recommend that other 4-H members attend this camp next year.	1	2	3	4

### **Question 8**

Please circle the number to indicate your level of agreement with the options to complete the statement.

The guest speakers and training experts helped me:	Never	Rarely	Sometimes	Often	Always
Learn new methods of feeding	1	2	3	4	5
Discover new events I could do with my horse	1	2	3	4	5
Learn how to treat wounds	1	2	3	4	5
Learn about foaling out a mare	1	2	3	4	5
Learn new horsemanship principles	1	2	3	4	5
Other (please specify on blank)	1	2	3	4	5

<u>Question 9</u>
Please circle the number to indicate your level of agreement with the following options.

How satisfied are you with:	Strongly Dissatisfied	Dissatisfied	Undecided	Satisfied	Strongly Satisfied
Travelling to and from the 4-H center	1	2	3	4	5
Leaving your horse at Diamond TR Ranch	1	2	3	4	5
Lodging accommodations at the 4-H center	1	2	3	4	5
Guest speakers at camp	1	2	3	4	5
Gaining new information	1	2	3	4	5
Your relationship with your horse	1	2	3	4	5

## Youth Summer Camp - Posttest Questionnaire

## Question 10

Please circle the number to indicate your level of agreement with the following statement.	Terrible	Dislike	Indifferent	Like	Excellent
How do you rate the overall camp experience?	1	2	3	4	5

#### Thank You!



Article 1: Appendix E.

Field Observation Guide

#### **Observation Field Data Collection Guide**

Unit of analysis: program participants and their equine subjects

Key points to document, when participants...

- Ask questions about horsemanship and/or safety practices.
- Attempt to answer knowledgeable questions regarding horsemanship practice.
- Proficiently complete a mock safety exercise
- Verbalize new aspirations for their equine project goals and exhibit positive actions toward other youth 4-H club members.
- Effectively and ineffectively answer questions posed by activity instructors.

Record non-verbal communication and signals among camp participants during activities. (Describe mediating and antecedent factors)

Record significant events such as disruptive equine behavior, a participant overcoming a hurdle, demonstrations of quality sportsmanship/teamwork, behavior traits of equine projects, weather, etc.



Article 1: Appendix F.

**Evaluation Report** 

## **Equine 4-H Summer Camp 2016**

Diamond TR Ranch Perryville, Arkansas

Arkansas 4-H Center Little Rock, Arkansas

# **Evaluation Report** July 2016

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Composed for:

Mark Russell, Ph.D. Assistant Professor and Equine Specialist University of Arkansas - Division of Agriculture Program Coordinator

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#### **EXECUTIVE SUMMARY**

The equine summer camp is open to all Arkansas 4-H members with equine projects and seeks to enhance horsemanship and safety knowledge among participants as well as expand awareness of equine-related educational resources. These aims seek to improve participants' ability to increase competitive capacity and decrease frustrations with their projects, thereby, increasing their likelihood to remain active in the horse 4-H program. The evaluation focused on providing a goal-based approach to measure program accountability and impacts according to participants' perceptions and field observation notes. All camp youth participated in a pretest questionnaire prior to equine activities on the first day of camp and a posttest questionnaire following the final equine activities on the last day of camp. The evaluator remained present to document field notes for the entire camp duration. Results provided a highly positive reflection of average knowledge, attitude, skill and aspiration levels among camp participants. Although some components demonstrate a slightly decreased rating in posttest results, the vast majority of responses were positive in nature. According to average group scores, the camp experience made positive impacts on participants; therefore, the overall camp goals were mostly fulfilled. The majority of participants became more knowledgeable and broadened their perception of resources about horsemanship and safety principles. Recommendations for future camps include exposing youth to more publicly accessible

Recommendations for future camps include exposing youth to more publicly accessible educational resources and segmenting group activities with strong consideration of riders' skill level and/or equine capabilities.

#### INTRODUCTION

#### **Need for the Program**

The equine summer camp seeks to help active Arkansas 4-H club members with horse projects gain skills they need to establish and develop a prosperous relationship with their equine projects. Currently, many members utilize unsafe and ineffective training practices which contributes to an overall frustration with equine projects and; therefore, contribute to the growing drop-out of youth in equine clubs as they age (M. Russell, personal communication, April 11, 2016). An increase in effective horsemanship will also aid members in becoming more competitive in their chosen events (M. Russell, personal communication, April 11, 2016).

#### **Goal and Objectives**

The goal of this camp is to provide 4-H horse club members with expert guidance to enhance horsemanship skills and diminish unsafe practices; ultimately, increasing members' desire to continue involvement with equine projects. The following objectives fulfill the camp goal:

- (1) Increase knowledge of horsemanship principles among all camp participants, as they relate to the 4-H horse program by the last day of the camp session, June 9, 2016.
- (2) Increase knowledge of safety practices among all camp participants, as they relate to the 4-H horse program by the last day of the camp session, June 9, 2016.
- (3) Provide individual camp participants with applicable resources to decrease challenges with their project by the last day of the camp session, June 9, 2016.

Situation	<u>Priorities</u>	Inputs	Outputs			Outcomes-Impact			
Active equine 4-H members lack proper horsemanship skills; therefore, are unsafe and/or struggle with horse projects. These struggles contribute to increased drop-out rates among equine 4-H club participation as members' approach 19 years-	Increase horsemanship knowledge, resources & skills.  Increase safety.  Decrease frustration with, and increase interest in, continuing equine project.	Mark Russell Carla Vaught Creena Bocksnick 4-H center (staff, lodging, meals) Diamond TR Ranch (Facilities management, feed, etc.) Coordinate guest speakers, trainers, volunteers and farm visits Time	Activities Irain Lessons Groundwork 1:1 and group Riding 1:1 and groupMock Competitions  DeliverGuest SpeakersReading materialsEducational VideosAdditional Resources  ProvideParticipant & equine housingmeals/feedsupervision	Participation Equine 4-H club members  Parents of camp participants  Equine 4-H club volunteer leaders of camp participants  Non-camp participant youth (camp participants share experiences & information with local club members)	Immediate Increased awareness of horsemanship and safety knowledge.  New skills to improve horsemanship and safety practices.  New attitudes toward equine projects.  New opinions toward youth equine 4-H club members.  Aspirations to improve horsemanship level and safety practices.	Intermediate Improvement in horsemanship and safety knowledge.  An appreciation for other competitors, improved sportsmanship.  Heightened level of interest and innovation in equine activities.  Dissemination of information by participants to others who were not attending camp.  Increased aspiration to see educational resources.	Long-term Increased competitive capacity among participants Increased support and interest in equine projects among participant parents, club volunteer leaders and community at large.  Increased longevity of equine 4-H club membership.  Enhancement of life skills among camp participants.		
old.	Antecedent Fact Individual person attitudes of parti of participants, be equine projects.	nalities and cipants, skill level		s to technology, n nmunities in effor	umber of participants, leve ts to establish positive cha		mong parents, volunteer sociated county agents and		

#### **Outputs, Outcomes and Impact**

The summer camp offers a hands-on approach to engage members in a variety of equine related activities, local industry perspectives and clinic-style training by local experts.

The camp provided activities which focused on riding practices, delivered guest speakers, trainers, local farm visits, as well as, housing, meals, supervision and, transportation to and from the Arkansas 4-H Center. Participation occurred among Arkansas horse 4-H club members, parents of campers, volunteer leaders of campers, camp volunteers, guest speakers and trainers, and potentially, other horse 4-H club members whom did not attend the camp through shared experiences by camp attendees.

After participants completed the camp, a variety of changes and results were expected to be seen, including but not limited to:

- Improved horsemanship knowledge among camp participants.
- Improved safety knowledge among camp participants.
- Heightened level of interest and innovation in equine activities among participants.
- Dissemination of information by camp participants to others whom did not attend the camp.

#### **Target Audience and Key Stakeholders**

The target audience for the summer camp included all current members of Arkansas horse 4-H clubs, ages 12-18, with riding experience and a horse that could be delivered to (June 6) and from (June 9) the Diamond TR Ranch near Perryville, Arkansas. Special circumstances provided the opportunity for some 11-year-olds to participate in the 2016 summer session. Suggested riding experience included being comfortable at all three gaits of walking, jogging (trotting) and loping. Due to the training focused nature of the camp a maximum of 22 members were allowed to participate and selected on a first come, first serve basis. The camp is primarily managed by Arkansas equine specialist Mark Russell, and heavily assisted by Polk County leadership and instruction Extension

agent, Carla Vaught, as well as camping coordinator of the C. A. Vines Arkansas 4-H Center, Creena Bocksnick. The horse-based camp activities took place on Diamond TR Ranch, which provided boarding for the horses for the duration of the camp. The participants were transported to Diamond TR Ranch each morning to engage in horse activities, and from the ranch to the Arkansas 4-H Center located near Little Rock, Arkansas each evening for meals and lodging – roughly 30 miles' difference. While at the Arkansas 4-H Center group evening activities included swimming, canoeing, making s'mores, and watching the film "Unbranded". Transportation was provided by the Arkansas 4-H Center. Creena Bocksnick is responsible for the activities and care of camp participants during their duration at the Arkansas 4-H Center. Other key players included: parents of participants, 4-H equine club volunteer leaders, and local equine experts whom volunteered to provide clinic-style training, demonstrations, and farm visits. Camp participants were provided the opportunity to learn from equine professionals with a variety of expertise such as: involvement and leadership of collegiate equestrian teams, horsemanship specialists, speed and performance competitors, English equitation, roping and bareback riding. One afternoon, a field trip included visiting a nearby thoroughbred breeding farm and a specialized wound care research center.

#### Environmental factors impacting the program

The Diamond TR Ranch facility included one covered arena large enough for group activities, one outdoor arena large enough for group activities and one small covered arena suitable for individual schooling. All camp horses were provided covered stalls with ample bedding. Weather and facility staff were highly accommodating throughout the duration of the camp; no activities were interfered by farm management procedures or outside clientele.

#### PURPOSE OF EVALUATION

The summative evaluation utilized participants' perceptions of the camp experience to measure the program's effectiveness and impact. The evaluation design was guided by Kilpatrick's Model which allowed the flexibility to tailor question content directly to camp curriculum and atmosphere. The Kilpatrick Model is composed of four major content areas: learners' reaction, learning, behaviors and overall results of a program (Businessballs, 2016). The evaluator utilized this framework to suit the program coordinator's request for program accountability. Furthermore, Kilpatrick's Model supported the opportunity to uniquely measure the knowledge, attitudes, skills and aspirations (KASA) of participants through pre and posttest questionnaires. By providing KASA results, the evaluation report could further support program coordinators' ability to measure program impacts at immediate, intermediate and long term levels.

The primary purpose of the evaluation included determining the extent to which the program goal and objectives were being met. Secondarily, the evaluation sought to provide insight regarding preferred communication channels among campers and a review of camp structure to aid future camps.

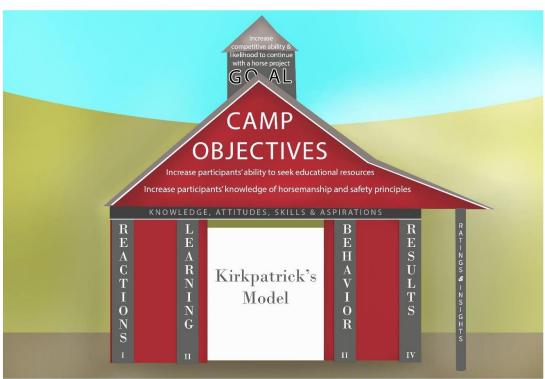


Figure 1. Illustrated frameworks of the evaluation design. Kirkpatrick's Model provided a foundation to measure participants' KASA; furthermore, determining the accountability of program to fulfill the stated objectives and goal. Camp ratings and insights were collected to aid the development of future camps.

#### **METHODS**

The evaluation included a census sample of 15 camp members through pretest and posttest questionnaires. In addition to questionnaires, daily field observations were documented by the evaluator.

All four phases of the Kirkpatrick Model were applied; however, long term results were measured according to participants' self-reported aspirations and intention to commit to camp enhanced practices. It was beyond the scope and resources of the program managers to track and perform follow-up examinations of participants' longevity retaining an equine project, horsemanship practices, safety practices and/or competitiveness. The explanatory case study allowed the flexibility and comprehensive capacity to determine cause-and-effect relationships as desired by stakeholders (Wholey, Hatry & Newcomer, 2010, p. 163). Learning and behavior assessments were tailored to the camp coordinator's agenda of educational scenarios. Other favorable aspects of this design included that participants could provide reaction and learning data throughout training sessions. Observation field notes provided detailed information about participant reactions, daily feats, program efficiencies and program deficits based on verbal and nonverbal cues among camp participants. Some limitations to the evaluation design included a shortfall in the questionnaires' ability to comprehensively measure educational content. Slight changes were made in program curriculum throughout the camp due to camp participants' expressed interests, the majority of campers' riding ability, volunteer specialists' areas of expertise and, time. Therefore, the pretest and posttest questionnaires included some content areas that were not covered during camp (i.e. feeding regimens) and lacked measuring content areas that were deeply discussed during camp (i.e. collection, flexion, bending). This limitation is noted in findings and results.

There are four categories of results, as related to guidance provided by the Kirkpatrick model. Reaction results in the questionnaire responses and field observation describe the participants' perceptions of the camp and willingness to adopt change. Participants' learning results provided a measurement of actual knowledge, attitudes, skills and aspirations changed during the camp session. Behavioral results were documented through field observations and participants' self-reports of current and future practices. Overall results of the camp were derived from the percentage of change among the knowledge, attitudes, skills and aspirations of camp participants.



Figure 2. Camp participants travelled to the Diamond TR Ranch from nine counties throughout the state.

On the morning of June 6, the first day of camp, the entire camp population gathered for a meeting once all the horses were properly tended and all tack and luggage stored. Introductions were made and barn safety rules were promptly explained. The pretest questionnaire was implemented directly following the meeting, and all the campers completed the questionnaire in a classroom type setting with few distractions. The questionnaire took approximately 10 minutes for the group to complete. The pretest questionnaire is available in Appendix A.

The evaluator remained present for all camp activities at the Diamond TR Ranch as well as group mealtimes at the Arkansas 4-H Center. Each day, field observation notes were documented after the completion of camp activities. The field observation guide is available in Appendix B.

The posttest questionnaire was administered during the final group lunch break, June 9, after the completion of all camp activities. There were several distractions during this time. Unlike the pretest, there was some chatter throughout the room and some interruptions by camp coordinators providing announcements, arriving parents and a general heightened excitement among campers. One participant failed to answer an entire section of their posttest questionnaire, leaving it blank, and other participants made mistakes such as selecting two answers for one question, or leaving a question unanswered. No consistency was found between the errors on the pretest and posttest questionnaires; therefore, it is assumed that the participants were distracted rather than lack of comprehension or inability to answer the question(s). Posttest questionnaire is available in Appendix C.

#### **Methodology of Questions**

Pretest question two provided a baseline to measure learners' reactions, later indicated in question one of the posttest. Participants first projected their level of satisfaction with elements of the camp experience in the pretest and then reported their actual satisfaction of the same experiences in the posttest. These questions sought to measure participants' expectations and fulfillment of those expectations.

Behavior change in seeking educational material about horsemanship was measured by percentages of change among group means in pretest question three and posttest question two. This question sought to provide a measurement of camp participants' level of resourcefulness. This behavior was related to the fulfillment of camp objective three: provide camp participants with applicable resources to decrease challenges with their project.

Responses to pretest question four and posttest question three provide the opportunity to calculate percentages of change in horsemanship skills and; thereby, measure the fulfillment of camp objectives one and two: to increase horsemanship and safety knowledge. Questions five and six of the pretest and four and five of the posttest are knowledge tests of specific content related to safety and horsemanship. The first and second camp objectives were again illustrated by changes between pretest and posttest scores. Question seven of the pretest and question six of the posttest provided the participants an opportunity to describe personal attitudes about safety, horsemanship and involvement in 4-H equine projects. Changes in mean illustrated shifts in participants' attitudes. Posttest question 7 asked participants to project their communication aspirations about the camp experience with others. Percent change in responses provided insight to behavior adoption (Rogers, 2003, p. 172-173, 199). Posttest question 8 asked

participants to provide an analysis of content delivered by guest speakers and trainers.

Average responses measured the fulfillment of camp objective to provide educational resources as well as accountability to provide expert guidance. Posttest question 10 asked participants to provide an overall rating of the camp experience, average responses sought to enhance planning of future camps. Field observations supplement themes found in the descriptive statistics.

Both pretest and posttest questionnaires were delivered as printed paper copies and the evaluator supplied pencils to mark answer selections. Camp participants did not ask the evaluator any questions while completing the pretest or posttest questionnaires and the evaluator only thanked the participants for completing the questionnaires.

#### Methods of Data Analysis

After the completion of camp activities pretest and posttest questionnaires were grouped according to participant, and participants were assigned numerical codes. All data was entered into Excel and categorized by individual. Pretest and posttest comparisons were analyzed for change per individual answer components, and average rating between the corresponding pretest and posttest responses. Etiquette and safety, as well as handing and riding knowledge tests were analyzed to measure changes in scores among individual questions. Each correct answer resulted in one-point, an incorrect answer or "don't know" resulted in zero points. "Don't know" responses were analyzed for differences in pretest and posttest questionnaires. Then, percent change in overall test scores were analyzed for both knowledge tests. Data illustrated each individual's percent change in test scores for both knowledge tests. Content areas that were only presented once in either pretest or posttest were simply transcribed from the paper test to the Excel

document to provide an electronic version of the responses. All data was entered into the Excel document for all participants.

Secondly, all responses were entered into a new Excel document and categorized by question. Corresponding pretest and posttest questions were paired and analyzed to report group mean, standard deviation and mode. Response errors were signified in the data analysis with an 'x' and eliminated from all calculations; therefore, averages were only divisible by responses with numerical values. Stand-alone pretest and posttest questions were analyzed to determine group averages. Demographic data was analyzed by percentage to illustrate age, gender, native district of participants, longevity of 4-H membership and years' experience with a horse project. Tables were created in Microsoft Word and charts were created in Excel to further illustrate data results. Trends were recognized upon creation of tables and within knowledge test scores and confidence levels in 'completing equitation patterns'. The decrease in average score of the handling and riding knowledge test suggested the need for further investigation. Data was broken back down into individual percent change in test scores and cross referenced with participants' age and years' experience with a horse project. This provided an opportunity to explore the root of the trends. The standard deviation posttest confidence levels in 'completing an equitation pattern' increased by over 100 percent. Therefore, this data set was cross referenced in a similar manner.

#### **FINDINGS**

The evaluation sought to determine the extent to which the program goal and objectives were being met as well as provide insight regarding effective communication channels among campers and a review of camp structure. The findings listed below feature tables and corresponding charts organized according to level of influence on the program goal and objectives. Findings begin with accountability measures of program goals and objectives, transition to communication topics, camp reviews, demographics and conclude with field notes. Charts are consistently color coded according to pretest (light orange) and posttest (green) and standard deviations are illustrated with error bars.

#### **Program Goal**

Provide 4-H horse club members with expert guidance to enhance horsemanship skills and diminish unsafe practices; ultimately, increasing members' desire to continue involvement with equine projects.

#### **Effectiveness of Guest Speakers and Trainers**

Participants provided a review of purposively selected topics demonstrated by the guest speakers and trainers in the posttest questionnaire, only. Some topics were not openly discussed during the camp session (i.e. methods of feeding).

Table 1
Review of Guest Speakers and Trainers (n = 15)

	Postt	est
Item	M	SD
Learn new horsemanship practices	4.67	0.72
Discover new events I could do with my horse	4.60	0.63
Learn how to treat wounds	4.53	0.63
Learn about foaling out a mare	4.27	0.88
Learn new methods of feeding	2.87	1.46
Other	0.67	1.76

Note. Scale: 1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always. Table arranged by descending order of percent change mean. According to group averages participants most highly rated "learn new horsemanship practices" and most poorly provided "other" responses.

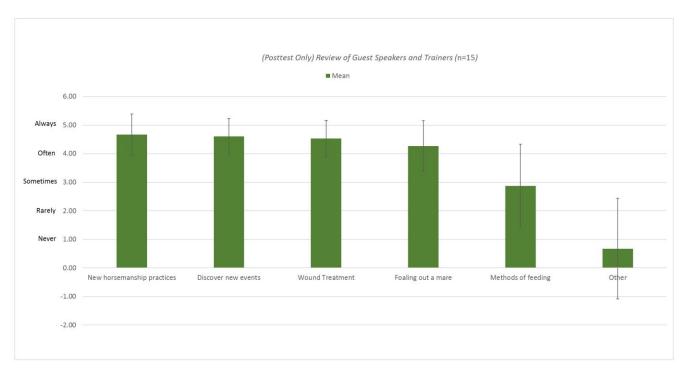


Figure 3. Average review of topics discussed by guest speakers and trainers whom volunteered their time and/or facilities during the camp session. One participant selected that they always received an 'other' asset from the guest speakers and trainers; however, did not name the asset.

#### **Desire to Continue Involvement with Equine Projects**

Participants reported their level of agreement with each statement in the pretest and again in the posttest. One participant did not provide any answers for this section.

Table 2
Self-Reported Attitudes of Horsemanship and Safety (n = 14)

_	Pretest		Posttest		% Change	
Item	M	SD	M	SD	M	SD
Sharing new knowledge about horsemanship and safety skills						
is enjoyable	4.13	0.83	4.29	1.72	3.90%	107.23%
Learning new training methods is helpful	4.80	0.41	4.79	0.58	-1.00%	41.50%
Being frustrated with my horse project will cause me to stop participating in the equine 4-H club	2.40	1.45	2.29	1.27	-4.60%	57.93%
Improving safety practices will make equine activities more enjoyable	4.53	0.64	4.29	0.61	-5.30%	-3.00%
Improving my horsemanship will increase my competitive	4.55	0.04	4.27	0.01	-3.3070	-3.0070
edge	4.47	0.74	4.36	1.01	-11.00%	36.5%

Note. Scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Undecided; 4 = Agree; 5 = Strongly Agree. Table arranged by descending order of percent change mean. Average responses illustrated the greatest increase in "sharing new knowledge about horsemanship and safety skills is enjoyable" and the most negative decrease in "Improving my horsemanship will increase my competitive edge".

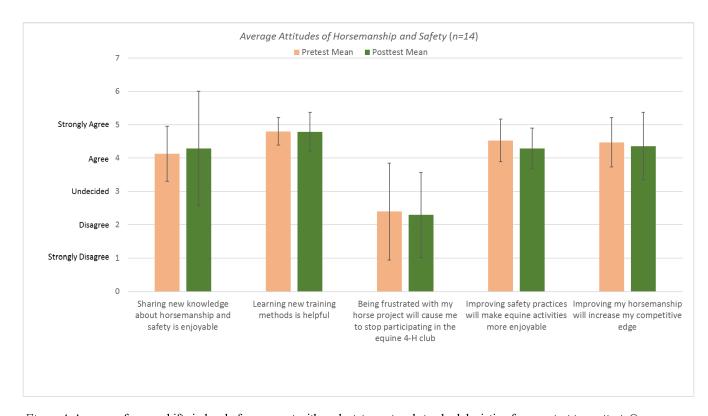


Figure 4. Average of group shifts in level of agreement with each statement and standard deviation from pretest to posttest. One participant did not provide responses for this section.

# **Program Objectives**

- (1) Increase participants' knowledge of horsemanship.
- (2) Increase participants' knowledge of equine-related safety.
- (3) Increase participants' awareness of equine-related educational resources.

#### Knowledge

Participants selected true, false or don't know for a series of questions in each test. The tests were purposively developed by the evaluator and program coordinator to test topics specifically covered during camp. "Don't Know" was included as an answer choice to provide participants' an option to avoid guessing the correct answer if they were not familiar with the topic. Some topics on the knowledge test were not discussed during the camp session, as noted previously in the methods section (i.e. feed rations, lime in stalls, tack care).

Table 3 Self-Reported Knowledge of Horsemanship and Safety, Overall Scores (n = 15)

	]	Pretest			Posttest		% Cł	nange
			Max			Max		
Test	M	$S\!D$	Score	M	$S\!D$	Score	M	SD
Etiquette and Safety Handling	3.07	1.10	5.00	3.73	0.59	5.00	21.50%	-94.60%
and Riding	6.80	1.32	9.00	6.73	2.71	9.00	-1.02%	105.30%

Note. True/false test, answer choices included true, false and don't know. 0 = incorrect answer/don't know; 1 = correct answer; Max Score = maximum possible score on the test.

Table 3.1 Self-Reported Knowledge of Horsemanship and Safety, Selection of "Don't Know" (n=15)

	Pretest	Posttest	% Change
Test	Selection	Selection	Selection
Etiquette and Safety Handling and	18	13	-38.50%
Riding	18	9	-50.00%

Note. True/false test, answer choices included true, false and don't know.

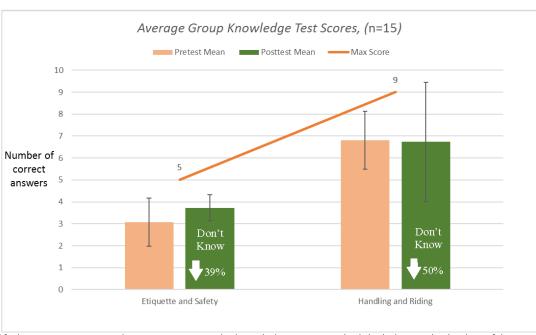


Figure 5. Shifts in average pretest and posttest scores on the knowledge tests, standard deviation, and selection of the answer choice "don't know". "Don't Know" was included as an answer choice to provide participants' an option to avoid guessing the correct answer if they were not familiar with the topic. Error bars illustrate standard deviation.

Data was broken down into individual percent change in test scores and cross referenced participants' ages and years' experience with a horse project to further explore the average findings of the knowledge test scores.

Table 3.2

Cross Referencing Age to Etiquette and Safety Knowledge Test (n = 15)

Age	% Improve	% Static	% Decrease
11 (n=2)	50.00	-	50.00
12 (n=2)	-	100.00	-
13 (n=6)	66.66	16.66	16.66
14 (n=1)	100.00	-	-
15 (n=2)	-	100.00	-
17 (n=1)	-	100.00	
18 (n=1)	100.00	-	-

*Note.* Individual percent change in scores were tallied then the percentage of individuals in each respectful age bracket were classified as improved, static or decreased. Approximately 46% of participants improved their test scores.

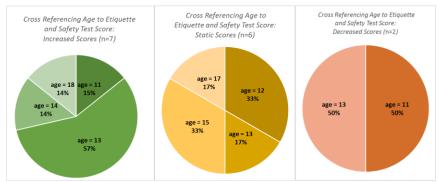


Figure 6. Pie charts illustrate the percentage of participants who expressed improved, static or declined etiquette and safety knowledge test scores, according to age.

Table 3.3

Cross Referencing Age to Riding and Handling Knowledge Test (n = 15)

Age	% Improve	% Static	% Decrease
11 (n=2)	100.00	-	-
12 (n=2)	50.00	50.00	-
13 (n=6)	50.00	33.33	16.66
14 (n=1)	-	100.00	-
15 (n=2)	50.00	50.00	-
17 (n=1)	100.00	-	-
18 (n=1)	100.00	-	-

Note. Individual percent change in scores were tallied then the percentage of individuals in each respectful age bracket were classified as improved, static or decreased. Approximately 60% of participants improved their test scores.

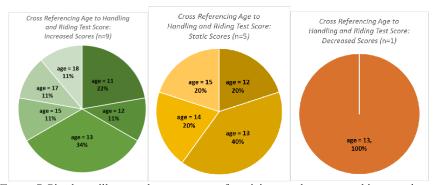


Figure 7. Pie charts illustrate the percentage of participants who expressed improved, static or declined riding and handling knowledge test scores, according to age.

Table 3.4

Cross Referencing Years with Equine Project to Etiquette and Safety Knowledge Test (n = 15)

Fauine

Experience	% Improve	% Static	% Decrease
0-3 years (n=9)	55.55	44.44	-
4-6 years (n=2)	50.00	-	50.00
7 + years (n=3)	66.66	33.33	-
Unknown (n=1)	-	100.00	-

*Note.* Individual percent change in scores were tallied, then the percentage of individuals in each respectful year bracket were classified as improved, static or decreased. One participant did not provide years' experience with a horse project. Approximately 67% of participants improved their test scores in etiquette and safety.

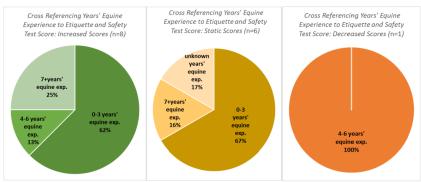


Figure 8. Pie charts illustrate the percentage of participants who expressed improved, static or declined etiquette and safety knowledge test scores, according to years' experience with a horse project.

Table 3.5

Cross Referencing Years with Equine Project to Riding and Handling Knowledge Test (n = 15)

Equine

Experience	% Improve	% Static	% Decrease
0-3 years (n=9)	66.66	22.22	1.11
4-6 years (n=2)	50.00	50.00	-
7 + years (n=3)	33.33	66.66	-
Unknown (n=1)	100.00	-	-

*Note.* Individual percent change in scores were tallied, then the percentage of individuals in each respectful year bracket were classified as improved, static or decreased. One participant did not provide years' experience with a horse project. Sixty percent of participants improved their scores on the riding and handling knowledge test.

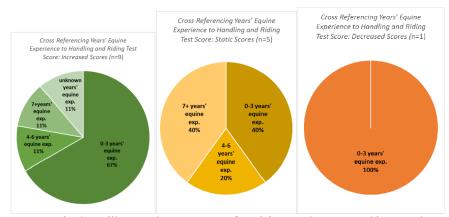


Figure 9. Pie charts illustrate the percentage of participants who expressed improved, static or declined riding and handling knowledge test scores, according to years' experience with a horse project.

# **Resource Aspirations**

Participants reported their current and projected information seeking behavior for each type of communication medium and/or outlet.

Table 4 Self-Reported Behavior in Seeking Equine Training Information (n = 15)

	Pretest		Posttest		% Ch	ange
Item	M	SD	M	SD	M	SD
Reading magazines	1.73	0.80	2.64	1.08	52.60	35.00
Watching training videos	2.47	1.13	3.64	1.22	47.37	7.96
Other	0.36	1.34	1.00	2.07	17.78	54.48
Asking my county agent	1.93	1.39	2.07	1.14	12.44	-17.99
Working with someone other than my club leader	3.80	1.32	3.79	1.05	-0.26	-20.45
Working with my club leader	3.40	1.68	3.21	1.31	-5.59	-22.02

Note. Participants reported current information seeking habits in the pretest and future aspirations of information seeking habits in the posttest. Scale: 1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always. Table is arranged by descending order of percent change mean. Average responses illustrated the greatest increase in "reading magazines" and the most negative decrease in "working with my club leader.

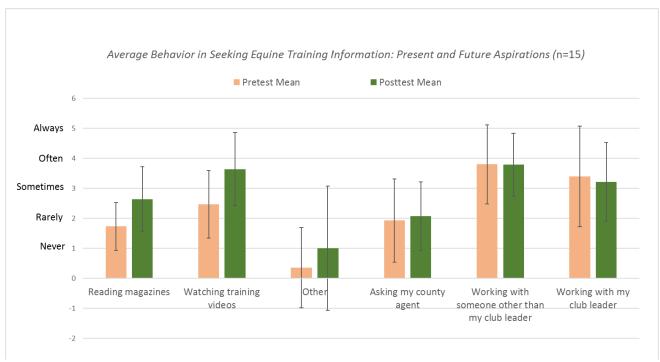


Figure 10. Average group shifts in current and projected information seeking behavior for each type of communication medium and/or outlet. In the pretest one participant selected always in the other section but did not signify a personal outlet. In the posttest two participants signified that they always seek advice from their trainers. Error bars illustrate standard deviation.

# **Skills**Participants reported their level of confidence with each horsemanship skill component in the pretest and posttest.

 $\label{eq:confidence} Table \ 5 \\ \textit{Self-Reported Confidence of Skills in Horsemanship (n=15)} \\$ 

	Pretest	Posttest	% Cha	ange
Item	M SD	M SD	M	SD
Clipping my horse	3.33 1.45	3.93 0.96	18.01	-33.80
Saddling my horse	4.73 0.60	5.00 0.26	5.70	-56.67
Riding with a group of people	4.13 1.30	4.33 0.90	4.84	-30.80
Loading my horse	4.53 0.74	4.74 0.60	4.64	-19.00
Staying balanced while riding	4.47 0.64	4.60 0.51	2.91	-25.00
Completing speed patterns	4.60 1.06	4.67 0.72	1.52	-32.08
Picking up my horse's feet	4.60 0.74	4.67 0.72	1.52	-2.70
Developing a feed ration for my horse	4.21 0.90	4.07 0.92	-3.33	2.22
Understanding different bits and their uses	4.07 0.80	3.87 0.92	-4.91	15.00
Completing equitation patterns	4.00 1.30	3.80 1.21	-5.00	-7.00

Note. Scale: 1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always. Table is arranged by descending order of percent change mean. Average responses illustrated the greatest increase of confidence in "clipping my horse" and the most negative decrease of confidence in "completing equitation patterns".

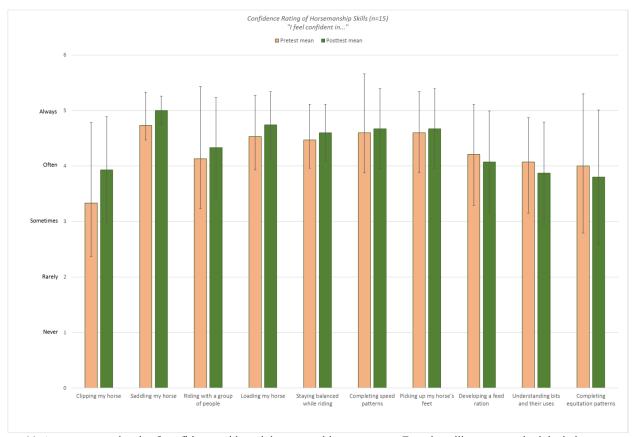


Figure 11. Average group levels of confidence with each horsemanship component. Error bars illustrate standard deviation.

Table 5.1 Cross Referencing Age to Confidence in Completing Equitation Patterns (n = 14)

Age	% Improve	% Static	% Decrease
11 (n=2)	-	100.00	-
12 (n=2)	50.00	50.00	-
13 (n=6)	33.33	50.00	16.66
14 (n=1)	-	100.00	-
15 (n=2)	-	-	100.00
17 (n=1)	-	-	-
18 (n=1)	100.00	-	-

*Note.* Individual percent change in scores were tallied then the percentage of individuals in each respectful age bracket were classified as improved, static or decreased. The 17-year-old did not provide a response for this section. When grouped by age, approximately 29% of participants improved their confidence in completing equitation patterns.

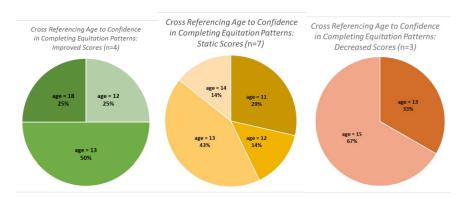


Figure 12. Pie charts illustrate the percentage of participants who expressed improved, static or declined levels of confidence in completing equitation patterns, according to age.

Table 5.2

Cross Referencing Years with Equine Project to Confidence in Completing Equitation Patterns (n = 14)

Equine

Experience	% Improve	% Static	% Decrease
0-3 years (n=9)	44.44	<b>-</b> 0	55.55
4-6 years (n=2)	50.00	-	50.00
7 + years (n=3)	66.66	33.33	-
Unknown (n=1)	100.00	-	-

Note. Individual percent change in scores were tallied, then the percentage of individuals in each respectful year bracket were classified as improved, static or decreased. One participant did not provide information on the years' experience with horse 4-H projects. When grouped by years' experience with a horse project, approximately 53% of participants improved their confidence in completing equitation patterns.

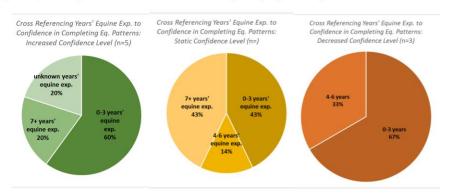


Figure 12. Pie charts illustrate the percentage of participants who expressed improved, static or declined levels of confidence in completing equitation patterns, according to years' experience with a horse project.

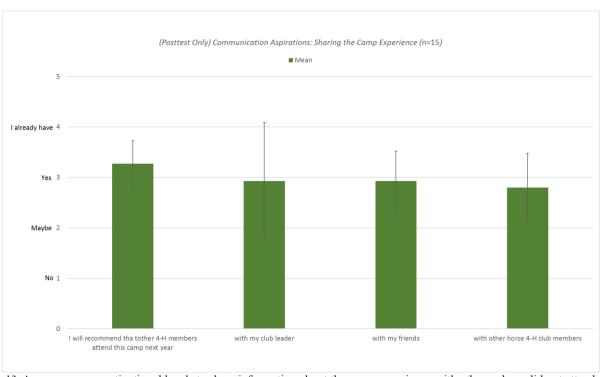
# **Communication Aspirations**

Participants reported their level of motivation to disseminate information about the camp experience with a variety of outlets.

Table 6
Self-Reported Communication Aspirations (n =15)

	Postt	est	
Item	M	SD	
I will recommend that other 4-H members attend this camp next year	3.27	0.46	
I will share my experience at camp with my club leader	2.93	1.16	
I will share my experience at camp with my friends	2.93	0.59	
I will share my experience at camp with other club members	2.80	0.68	

Note. Participants reported present and future aspirations of communication behavior in the posttest. Scale: 4 = I already have; 3 = Yes; 2 = Maybe; 1 = No. Average responses illustrated the greatest level of aspiration in "recommending that other 4-H members attend this camp" and the least aspiration in "sharing the camp experience with other club members".



*Figure 13.* Average group motivational levels to share information about the camp experience with others whom did not attend camp. Error bars demonstrate standard deviation.

# **Camp Reviews**

Participants were asked to provide the camp experience an overall rating.

Table 7
Overall Camp Rating (n=15)

	Postte	est
Item	M	SD
Overall rating of camp experience	4.80	0.41
Note. Scale: 1 = Excellent; 5 = Like; 4 = Indifferent, 3 = Dislike; 2 = S	trongly Sa	tisfied, 1
= terrible.		

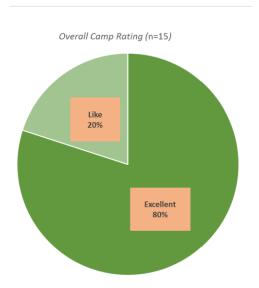


Figure 14. The pie chart illustrates the actual overall camp ratings according to individual responses.

Participants reported aspirations about level of enjoyment from each item in the pretest and reported their level of satisfaction of each item in the posttest.

Table 8
Self-Reported Aspirations and Fulfillment of Camp Experience (n = 15)

	Pretest		Posttest		% Change	
Item	M	SD	M	SD	M	SD
Fix a problem	3.87	1.13	4.86	0.36	25.58	-68.14
Become more competitive at events	3.93	0.96	4.14	0.77	5.34	-19.79
New ideas to try at home	4.80	0.41	4.86	0.36	1.25	-12.19
Take my horse	4.80	0.41	4.86	0.36	1.25	-12.19
One-on-one instruction	4.53	0.75	4.21	0.80	-7.10	6.67
Other	0.36	1.34	0.33	1.29	-8.30	-3.73

Note. Pretest Scale: 1 = Never; 2 = Rarely; 3 = Undecided; 4 = Often; 5 = Always. Posttest Scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Sometimes; 4 = Always; 5 = Strongly Agree. Table is arranged by descending order of percent change mean. Participants were most satisfied with the opportunity to "fix a problem" and least satisfied with "other" responses. In the pretest one participant selected that they always believe they will enjoy the camp due to "meeting new people". In the posttest 5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = Strongly Disagree. In the post test one participant selected that they strongly agreed they "fixed their poles".

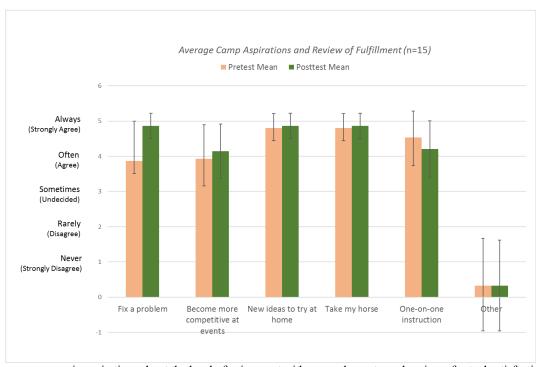


Figure 15. Group averages in aspirations about the level of enjoyment with camp elements, and review of actual satisfaction with camp elements. Likert-scales were used in both pretest and posttest questionnaires; however, the wording was altered to be most compatible with the tense used in the instrument. In the pretest 5 = Always, 4 = Often, 3 = Sometimes, 2 = Rarely, and 1 = Never. In the pretest one participant selected that they always believe they will enjoy the camp due to "meeting new people". In the posttest 5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, 1 = Strongly Disagree. In the post test one participant selected that they strongly agreed they "fixed their poles".

Desire for one-one instruction and satisfaction with one-one-one instruction were further analyzed to illustrate the change in trends.

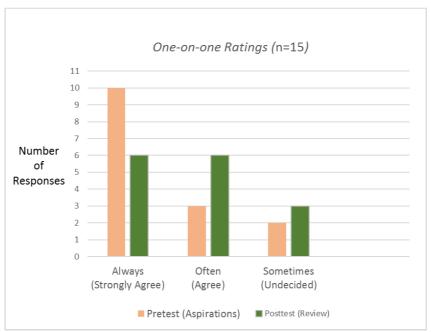


Figure 16. The bar graph illustrates the frequency of participants whom expressed the desire for one-on-one instruction during the camp during the pretest and their satisfaction with one-on-one instruction in the posttest.

Participants provided a review of camp components and facilities involved in the camp session.

Table 9 Satisfaction with Camp and Facilities (n = 15)

	Postt	Posttest	
Item		SD	
Relationship with horse	4.93	0.26	
Guest speakers at camp	4.73	0.45	
Leaving my horse at Diamond TR Ranch	4.67	0.49	
Gaining new information	4.60	0.74	
Travelling to and from the 4-H Center	4.60	0.63	
Lodging accommodations at the 4-H Center	4.47	0.92	

Note. Scale: 1 = Strongly Dissatisfied; 2 = Dissatisfied; 3 = Undecided; 4 = Satisfied; 5 = Strongly Satisfied. According to group averages, participants were most satisfied with their relationship with their horse and least satisfied with the lodging accommodations at the 4-H Center.

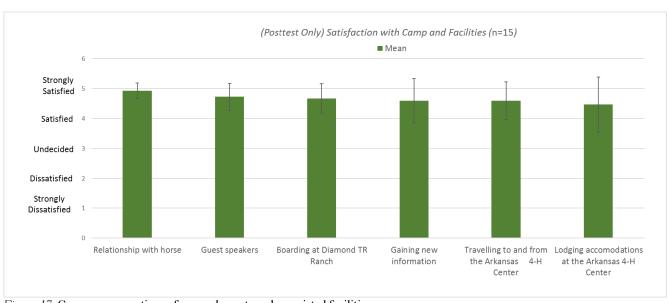


Figure 17. Group average ratings of camp elements and associated facilities.

# **Communication Channel Insights**

Participants provided a rating of their preference to utilize several communication outlets to gather information about 4-H opportunities.

Table 10 Self-Reported Communication Channel Preference for 4-H Activities (n = 15)

	Posts	Posttest	
Item		SD	
My club leader	4.60	0.63	
My county extension agent	4.00	0.96	
Websites	3.79	0.70	
Parents	3.73	1.44	
Social media	3.21	1.19	
Friends	2.93	1.58	
Other	0	0	

 $\overline{Note}$ . Scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Undecided; 4 = Agree; 5 = Strongly Agree. According to group averages, participants most commonly seek information about 4-H activities from their club leader, are unsure about seeking this information from their friends and offered no "other" options.

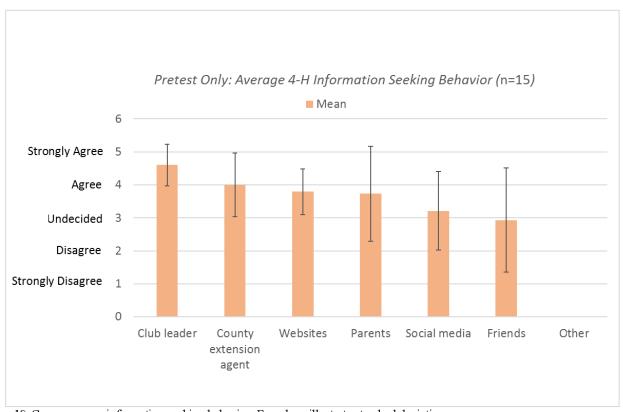


Figure 18. Group average information seeking behavior. Error bars illustrate standard deviation.

# Demographics

The following demographics were self-identified by participants in the pretest questionnaire. As the summer camp date approached camp coordinators recognized that a few openings remained in the camp and opened the opportunity to "older 11 year olds" whom were interested.

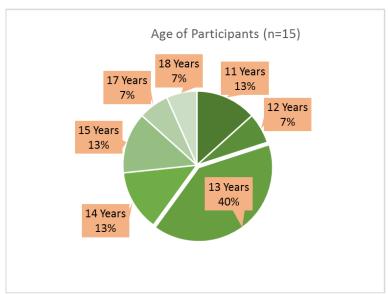


Figure 19. Most participants were 13 years old.

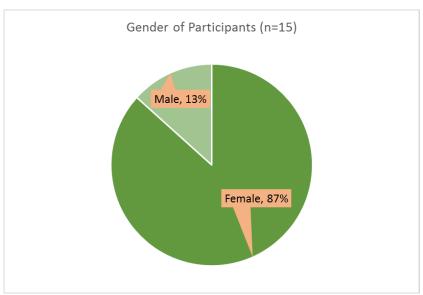


Figure 20. The camp was dominantly female.

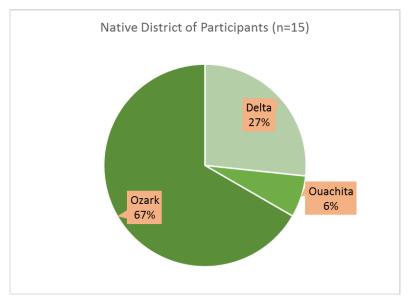


Figure 21. Participants were predominantly from the Ozark district, followed by the Delta district, and the Ouachita district.



Figure 22. Most participants had 1-3 years' experience as a 4-H member.

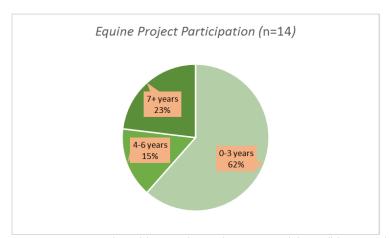


Figure 23. Years active with an equine project. One participant did not provide a response to this section.

#### Field notes

# Monday 6/6/2016

15 total participants (13 girls, 2 boys)

- Ages ranged from 11 to 18
  - The camp is typically open to 12 18 year olds; however, there was increased interest in the camp so coordinators allowed "older" 11 year olds to participate as well. (Carla Vaught).

#### Overview of daily activities:

- Camp began with everyone gathering around in a circle so Mark could introduce
  the camp staff Sarah Whitaker (Logan County 4-H agent), Paige Tipton
  (undergrad intern), Ariel Finkenbinder (Therapeutic Riding Instructor, Equestrian
  Zone, Russellville), Carla Vaught (CEA- Staff Chair, Polk County), Kelsey
  Matthews (extension intern), Mark Russell, and myself.
- Diamond TR Farm Owner, Theresa Vogelpohl, gave a short speech about barn rules and mandatory safety protocols (helmets, no riding double, no running in the barn, no yelling, etc.)
- Pretest administered as a group in the office area of the facility. Participants
  appeared nervous but eager to get going with camp activities. There was no
  conversation among participants throughout the course of the pretest. There were
  no distractions in the room. Participants were provided a paper test and pencil.
  The evaluator did not provide any instruction or warning to the participants about
  test components, only thanked them for completing the questionnaire. No
  questions were asked by the participants.
- Group saddled horses and met in big covered arena and spent some time riding around at will. Camp coordinators took this time to observe the participants.
- Some tack adjustments were made by camp coordinators, including attaching a belly band to the cinch.
- Entire group met again in a circle (horseback) and Dr. Russell gave a short speech about the history of the camp, asked if anyone had particular issues they wanted to work on (very few voiced an issue, one said wanting to extend the trot without picking up speed, another mentioned stopping). Everyone was asked whether they were comfortable loping and all were silent (turns out a couple couldn't pick up a lope and another wasn't comfortable loping). Overall, this was a high pressure situation for the kids because they were immediately asked to perform a trot and lope in front of the entire group. One girl was teary eyed at the end of her execution and another very green rider was shaken by the act of trying to lope (unsuccessful).
- There was a tense and somewhat uncomfortable feeling among the group as each participant awaited their turn to perform in front of the group.
- Mark, Carla and Ariel spoke interchangeably throughout.
- After completion of the participant trotting and loping exercise the entire group was split to in half.

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- One group went to the far side of the arena with Ariel
  - Walk and trot figure 8 between poles, working on flex and bending
- The other group was placed with Kelsey & I
  - Walk and trot serpentine, working on flex and bending
  - Kids were asked to discuss one thing the rider did really good and one thing they could work on. Participants focused on looking up while riding and crossing the serpentine in the center of the distance between two cones.
    - Although they required extensive coaxing to speak, most kids were able to voice equine components and riding style.
- o The groups swapped after about 45 minutes
- At the end of day (around 4 pm) horses were returned to stalls and kids were loaded into 2 vans and taken back to the 4-H center.
- Dinner and swimming/canoeing activity
  - Was interesting to watch the personalities among participants while attempting to teaching each other how to dive off the diving board. They entire group seemed much more at ease and began bonding.

Others in attendance – Ag Ed teacher from Baxter County (son was in camp)

#### Riders' Skill Level

- The camp coordinators repeatedly discussed in private and publicly about how
  great it was to have a group of kids whom were of a consistent riding level and
  enthusiasm about riding.
- Most were intermediate riders, few were advanced

#### Tuesday 6/7/2016

Overview of Daily Activities

- Breakfast began around 7 am and everyone arrived at the ranch around 8 am. The day began with each camper caring for their horse. Campers appeared to be solely responsible for the care and maintenance of their horses.
- Theresa gave a short presentation on how to properly clean a stall, including finding wet spots. However, liming was not discussed. (lime was included in knowledge test).
- Everyone saddled their horses and entered the large covered arena in a casual
  manner to warm their horses up at will. No riders did ground work or spent time
  bending their horses, several quickly began loping around the rail. Few
  participants displayed ring etiquette or called out when passing other riders –
  some crashes almost occurred. One horse wanted to pitch, the rider stayed on but
  did not utilize any measure to correct the issue.
- A few tack adjustments were advised by camp coordinators including adjusting stirrups, lengthening (or exchanging) loop reins, adjusting curb straps and bit placement.
- Dr. Russell made the announcement that he felt participants were well skilled riders and gave a presentation about lead changes, particularly flying lead changes
  - He opened the arena to anyone whom wanted to try to perform a flying lead change utilizing his technique. All kids whom tried were unsuccessful and began the day's exercises with heavy loping and some even became frustrated. Most horses were heavily one-sided.
  - o This exercise was conducted one at a time in front of the entire group.
  - Guest trainers began arriving as participants were attempting to complete the activity.
- Ariel substituted as the instructor and continued allowing kids to attempt the
  maneuver until it was called quits quite some time later. No one was able to
  successfully complete the task.
- Entire group was split into 3 sections
  - Daniel Potter worked with kids on stopping without the use of reins (cones exercise)
  - Steve Jones worked with kids on turning and bending around cones
  - O Paige Tipton worked with kids in outside arena on bending using poles
    - Significant one on one emphasis was given to kids with heavy hands to quiet them. Comparisons were made to being yelled at all the time – pretty soon you don't listen any more.
  - Steve Jones left before last group changed, Mark overtook that group and worked on a horsemanship pattern
- Everyone broke for lunch
- After lunch, entire group rejoined in arena and rode at will. I provided advice to
  participants whom appeared distressed or struggling with their horses during this
  time. One needed to drop her stirrups, another was still frustrated with her horse

not picking up a flying lead change (super stiff) so we worked on haunches in and haunches out. Once everyone returned to the arena the kids were instructed by Dr. Russell to swapped horses 4 or 5 times.

- Participants were primarily advised by Ariel, and Sarah joined in the activities.
- Most participants seemed to enjoy the activity. One was protective of her horse and refused to switch until the last few opportunities, she did feel comfortable sharing in the end.
  - The riders were doing a lot of loping and created a very high energy environment.
- Dr. Russell then announced that everyone was to complete a horsemanship pattern
  on any horse other than their own.
  - A very green participant's horse became stubborn about leaving the group, she was asked to remount her horse and try to complete the pattern. The horse began to rear so she was ponied down to the other end by Sarah and worked with getting him to listen.
    - She returned and had to use the end of her rein to whip him and got him to move forward through the patter, successfully. Everyone clapped heartily!! Huge day for this participant, big grin.
  - Participants were asked to communicate with others about how to best work with their horse and provide feedback after each participant completed the equitation pattern.
    - Again, the campers had to be heavily coaxed by Dr. Russell to communicate, but when responses were given they were knowledgeable.
  - Few participants were able to complete the pattern with ease; however, all
    participants dutifully tried and some even retried the pattern to make a
    correction.
    - The lightbulbs are starting to go off.
- Group broke to unsaddle, manage their stock, and depart for the 4-H Center.
- Power outage at the Arkansas 4-H Center
- Group participated in s'more making activity that evening with a camp fire.
  - Campers are becoming highly comfortable with each other and more cohesive.

#### Wednesday 6/8/2016

#### Daily Activities

- Breakfast was promptly at 7 am, everyone arrived at the farm as soon as possible to care for their horses.
- Everyone loaded into 2 vans (except Leanna, Will's mom) and travelled about an hour to Dr. Jolly's Farm near Hot Springs.
  - Toured the barn, breezed a horse on the practice track, everyone went up in the box to watch. Everyone seemed highly engaged in the activity, wellmannered and respectful.
  - Orphan baby, discussion about milk supplement options
  - Watched a castration, Dr. James discussed squeelers and the proper care
    of a tranquilized horse. Campers were shown the anatomy of the testes and
    tools utilized to perform the operation.
  - A variety of horses with critical wounds were presented to the campers as Dr.
     Jolly and his assistants performed routine bandage changes and inspections.
    - One camper began getting squeamish and was excused from the activity by camp coordinators.
    - Most kids were respectful of the setting and remained engaged throughout the observations.
  - Ate sack lunches in Dr. Jolly's home and watched a slideshow of wounds progressing over time (same horses we saw in real-time)
    - Most kids were okay with the reality of the photos and discussion, the upset individual did intermittently join and retreat from the discussion area.
  - Dr. Jolly entertained a few questions from the group and offered some general advice about wound care
- Travelled a few minutes down the road to Starfish Farms, Ms. Robbins
  - Gained pamphlets of stud book and toured the farm to look at the variety of stallions, mares, yearlings and foals
  - Short demonstration of modern breeding tools and breeding shed
- Travelled back to Diamond TR Ranch
- Participants were provided the option to ride bareback or english
  - One participants had never ridden bareback or her horse bareback, she was placed on a lead rope.
  - Several campers struggled to keep their horses standing still to mount, some required assistance to hold their horse at the mounting block or get a leg up.
- Participants rode in the large covered arena at will (very dusty)
  - Sent to Paige and I 2 at a time in the small indoor arena to work on seat and any other issues – most kids expressed issues they had the desire to correct. Individual training was limited to 15-minute time slots.
- Great day overall, riders are making progress and enjoying camp, and express increased engagement in activities.
- Campers watched movie 'Unbranded'; however, few were interested due to the
  documentary style setting, most spent the time focused on their cellphones.

# Thursday 6/9/2016

#### Daily Activities

- Breakfast around 7:15
- Upon arriving at the farm everyone managed their horses and cleaned their stalls
  - A lot of team work between participants to carry manure buckets, share forks and tote water.
- A lot of confusion and mixed messages by program coordinates in providing participants with instructions for the first activity. Highly inefficient and a lot of confusion.
- Everyone lined the rail of the small schooling arena and provided a short 1 2
  minutes teaching clinic showcasing something (anything of choice) they wanted
  to teach the group. Most chose subjects which had been covered one-on-one with
  guests or at large with the group. Some showcased personal specialties (bridle less
  riding, jumping, roping, etc.)
  - Excellent job overall, most participants were very creative and willing to educate the group.
  - Excellent demonstration of outcome indicators as individuals discussed specific topics they were working to correct or had been brought to their attention.
- Guest Speaker Dr. Heidi Ward discussed opportunities with 4-H from a veterinary science perspective.
- Group was split in two segments
  - o Rachel Bearden, CEA Agri, Hot Spring County
    - Took her group to the large outdoor arena and worked on speed patterns
    - Self (split half)
      - Roping, how to hold a rope, little swinging and alternating sides.
         Most weren't ready to rope the dummy but did successfully get
         started on cones. Many were trying to rope for the first time,
         mounted with stiff ropes.
  - Paige (split half)
    - Horses were placed in stalls and work on feel with own bridle in groups of two, working on ground to accomplish a task.
- Everyone gathered in the outside arena for a group photo, then went to untack.
- Campers gathered to watch a demonstration by Dr. Ennis, Equine Chiropractic (Conway)
  - o Saddle fit, Saddle pads
- Everyone broke for lunch
- Conducted posttest in facility office area as a group. The atmosphere was highly
  energetic as campers prepared to haul their horses home, parents started arriving
  and camp coordinators had announcement to make. Participants were eating lunch
  and taking the posttest simultaneously.
- Clean stalls and load up after lunch, took approximately 2 hours to get everyone loaded and off the facility.

# CONCLUSIONS

The goal based evaluation sought to measure the fulfillment of the camp goal and objectives. Did participants gain horsemanship knowledge, skills and resources? Did participants increase their knowledge of safety practices? Where participants able to fix a problem with their horse or learn ways to decrease their frustration with their projects? When participants left camp where the motivated to share the experience and increase the longevity of participating in horse 4-H projects? These elements were measured through pretest and posttest changes in knowledge, attitudes, skills and aspirations. Secondarily, the evaluation sought to provide insight regarding effective communication channels among campers and a review of camp structure to aid future efforts of camp managers. The Kirkpatrick model guided the evaluation design; therefore, pretest and posttest questionnaires sought to measure participant reactions, learning, and behavior. Field notes sought to supplement the questionnaire results. Data trends demonstrate overall camp results.

#### **Overall Camp Results**

Responses in pretest and posttest questionnaires reflected the camp as broadly successful and enjoyable among group averages. Nearly all content areas were marked above the median level of Likert scales in group averages. Although some decreases in pretest and posttest data do exist, the vast majority remain above the *undecided* or *sometimes* descriptors.

According to average scores, the camp did make positive impacts on participants as illustrated in the overall results of pretest and posttest averages. Most participants became more knowledgeable as well as broadened their perception of resources about horsemanship and safety principles. Beyond the camp objectives, the results also indicated increased attitudes, increased skills, and positive aspirations about horsemanship and safety principles.

# Strengths According to Group Averages

- Increased etiquette and safety knowledge
- Most attitudes of horsemanship and safety became more positive
- Confidence levels were raised in most horsemanship skill areas
- Increased motivation to seek a variety of educational mediums
- Aspiration to share information about their camp experience with others
- Aspiration to recommend the camp to others
- Comprehension of lessons provided by guest speakers and trainers
- Most aspirations about the camp experience were fulfilled
- Highly satisfied with camp and facilities
- 80% described the camp as excellent
- 13 total guest speakers and trainers

#### Weaknesses According to Group Averages

- Most knowledge test scores in handling and riding did not increase
  - As years of experience with a horse project increased, percent change in test scores decreased
- Some participants did not strongly agree in the direct relationship between horsemanship and competitive ability
- Some campers did not report a positive attitude about horsemanship and safety skills
- Inconsistent levels of confidence completing equitation patterns
- Inconsistent levels of knowledge understanding bits and their uses
- A decrease in aspirations to consult club leaders for horse training tips
- Some participants were undecided about their level of fulfilment with one-oneone instruction

# Fulfillment of Program Goal and Objectives

Knowledge tests consisted of four major components organized in two sections:

(1) etiquette and safety; (2) handling and riding. The average of group scores in etiquette and safety increased by nearly 22% and the range of individual scores condensed by 95%. This change describes camp participants cohesively gained etiquette and safety knowledge. This change might also suggest that etiquette and safety lessons were well managed and diversely taught to the wide range of participants. Participants whom selected "don't know" responses to questions decreased by nearly 40%. On the other hand, the handling and riding component showed a slight decrease by one percent among group average scores, and the variety of individual scores increased by 105%. Average selection of "don't know" decreased by 50% in this section. A trend was identified when correlating riders' ages and years' with an equine project to riding and handling knowledge test scores. As years with riding experience increased, riding and handling test scores became increasingly static. However, the majority of riders with three years or less experience improved their riding and handling test scores. These changes suggest the camp experience left participants confused or unsure about handling and riding practices.

Camp participants were exposed to a wide range of industry professionals and provided insights and guidance to improve horsemanship practices. Field notes describe that group lessons commonly focused on softening the horse as well as the riders' hands during group work and a variety of riding patterns. Other lessons included utilizing verbal commands to halt, and one-on-one instruction with a problem or issue according to individual participants. According to field notes there was no formal discussion by camp leaders suggesting external resources to further enhance horsemanship practices. The participants reported a 53% increase in future likelihood to consult magazines to learn

more about horsemanship, a 47% increase in future likelihood to watch training videos and 20% increase in future likelihood to consult a trainer for more information about horsemanship. Working with horse 4-H club leaders remained the most likely educational resource among participants; however, the group average dropped by six percent.

Although camp coordinators and trainers did not formally announce external resources to consult, average group aspirational levels to seek magazines, training videos and trainers increased.

#### **Solutions and Decreasing Frustrations**

In the pretest, camp participants reported they always aspired to fix a problem with their horse at camp, and reflected they strongly agreed they were able to do so.

Group averages also reported campers deeply disagreed frustrations with their equine project would cause them to discontinue participating in a horse 4-H club. Therefore, the camp experience did successfully enable campers to fix a problem with their horse and increase motivation to continue pursuing horse 4-H projects.

# Sharing the Experience

The most highly ranked and highly concentrated communication aspiration among average scores included recommending that other 4-H members attend this camp next year. The average trend among communication aspirations included sharing information about the camp experience with club leaders, friends and other 4-H club members. Some participants reported that they had already discussed their camp experience with their club leader. These communication trends support that participants are engaging in behavior adoption according to diffusion model expert, Everett Rogers (Diffusions of Innovation, 2003, p. 172-173, 199).

#### Communication channels

Group averages signified that participants most commonly seek information about 4-H opportunities from club leaders, county extension agents, websites and parents. Most are undecided about receiving information from social media and friends.

#### Review of Camp

Group averages signified that participants were most satisfied with their ability to fix a problem with their horse during the camp experience. Secondly, they felt the camp experiences enabled them to become more competitive at events, and they had new ideas to try at home. Campers were satisfied with the design of utilizing their personal equine project; however, they were somewhat less satisfied with the opportunity for one-on-one instruction than they projected would be available. In the pretest one participant stated they aspired to enjoy meeting new people at camp and in the posttest one participant stated they were highly satisfied with their ability to improve a pole bending pattern.

#### **Guest Speakers and Trainers**

On average, the campers nearly always learned new horsemanship practices from guest speakers and trainers, discovered new events they could do with their horse, and learned how to treat wounds. Participants reported that guest speakers and trainers often helped them learn about foaling out a mare and sometimes learn new methods of feeding. The field notes describe that the guest speakers and trainers provided a diverse scope of the equine industry and practices. The field notes state a rotation of 13 total guest speakers and trainers throughout the four-day period. Guest perspectives and lessons were highly comprehendible throughout the diverse camper population according to posttest ratings. The field notes do not describe an instance when feeding practices were openly discussed by guests during the camp session; therefore, it was anticipated that this content area would receive a lesser score. However, posttest averages reported that

participants sometimes gained feeding knowledge about feeding. Due to the disbursed nature of camp activities and utilization of the evaluator as an instructor, the field notes may lack documentation of an instance where feeding practices were discussed among a small group. A single camper or a small group of campers may have had a private discussion regarding feeding practices also, which is reflected as a possibility in the broad range of answers provided by individuals.

#### **Facilities**

Participants completed the camp feeling strongly satisfied with the relationship with their equine project, guest speakers and trainers, boarding their horse at the Diamond TR Ranch, gaining new information, and travelling to and from the Arkansas 4-H Center. Participants also reported being satisfied with lodging accommodations at the Arkansas 4-H Center. Overall, the settings and accommodations received a positive review.

#### **Camper Satisfaction**

The camp experience received an "excellent" rating by 80% of the participants and the remaining 20% reported they liked the camp.

#### **Insights and Demographics**

- Most participants typically utilize their club leader and county agent to seek information about 4-H opportunities, followed by websites.
- Participants were undecided about utilizing social media and friends to learn more about 4-H activities.
- The majority of participants were 13-year-old females.
- Only 13 percent of participants were male.
- Over half the participants were native of the Ozark District, followed by the Delta District and least of all, the Ouachita District.
- Most participants had 0-3 years' experience as a 4-H member.
- Over half the participants had 3 years' or less experience with an equine project.

#### RECOMMENDATIONS

Accountability: Continue incorporating guest speakers, trainers, and farm visits.

- These resources had an extremely positive impact on youths' knowledge, skills and educational resource awareness.
- Youth were exposed to a diverse population of professionals in the local industry.

Satisfaction Ratings: Utilizing youths' projects for camp lessons.

- On average, youth improved their relationship with their horse.
- On average, campers were satisfied with boarding their horses at the Diamond TR facility for the duration of camp.
- Opportunity to use participants' tack and horses to implement demonstrations and make first-hand recommendations for improvement.

Satisfaction Ratings: Continue utilizing the 4-H Center

 On average, participants were pleased with travelling to and from the 4-H Center, the dorm style accommodations and associated amenities.

Communication Efforts: Youth prefer to learn about 4-H opportunities through their 4-H club volunteer leader(s).

• On average, campers were skeptical of learning about 4-H opportunities through social media.

The camp aimed to increase all participants' knowledge in handling and riding principles. The percent change in test scores of participants with 0-3 years' experience significantly increased. As years of experience increased among participants, the percent change in pretest and posttest scores decreased.

#### Suggestion:

- Discuss the importance of continual learning and emphasize the ability and concern for all camp participants to exercise this frame of mind throughout the camp.
- Tailor educational lessons to levels of existing knowledge and/or interest among participants.

## **Potential Impact:**

- Increase the opportunity to develop respect for horsemanship principles.
- Maximize impact on individuals.

The overall aim of the camp included increasing the competitiveness and longevity of participation in horse projects among all participants. Some participants reported they did not believe increasing horsemanship practices would increase their competitive edge.

#### Suggestion:

- Incorporating professional examples and testimonies highlighting the purpose and importance of horsemanship
  - Discussion, reading assignment, short video about horsemanship focused trainers
    - i.e. Buck Branaman, Chris Cox, Bill Dorrance, Ray Hunt, Pat Parelli, Clinton Anderson, Stacy Westfall, Julie Goodnight etc.
  - Key excerpts from magazines
    - i.e. Western Horseman, Eclectic Horseman, Chronicles of the Horse

## **Potential Impacts:**

- Enforcement of all three camp objectives
- Increase credibility of camp coordinators and content

The camp sought to increase riders' competitive capability with emphasis on horsemanship patterns and exercises. The posttest rating of confidence among camp participants became increasingly inconsistent; therefore, some participants felt very confident while others reported never, rarely and sometimes confident in completing equitation patterns.

#### Suggestions:

- Help participants understand the layers of collection and balance in their horse as well as themselves.
  - It may also benefit the confidence of riders to discuss that equitation corrections require extensive practice and dedication to overcome.
- Provide the group with a few simple exercises they can do to improve their basic equitation capacities in their home environment.
  - Cones and arenas aren't necessary to work on looking up, collection, holding a balanced circle, haunches in haunches out, shoulder in shoulder out, balanced pivots, transitions, etc.
- Discuss equitation specific resources books, videos, magazine clippings
  - o i.e. Centered Riding Sally Swift; True Horsemanship Through Feel Bill Dorrance; 101 Jumping Exercises L. Allen with D. Dennis, etc.

## Potential Impacts:

- Generate a depth of knowledge and critical thinking.
- Help participants understand the scope and depth of correcting imperfections.
- Enable participants to be creative in their home environment so they can continue
  honing skills after camp, supporting the overall camp goal to increase competitive
  edge and decrease frustrations.
- Expose participants to a wide variety of resources, this may peak their interest and enable them to be more self-sustaining in their home environment. Utilizing publicly accessible resources (rather than solely speaking from experience) has the potential to make a deeper, lasting connection with a variety of riders.
- Help the youth become their own trainers.

One area of interest in camp curriculum included increasing participants understanding bits and their uses. In the posttest participants provided a variety of confidence levels; therefore, suggesting that the educational exercise may have humbled their perspective or caused some confusion.

### Suggestions:

- Do a show and tell utilizing campers' bits, hold a discussion about how the bits utilize leverage (or don't) and discuss the pros and cons of different bit designs. Discuss how participants may find value in trying different types of bits while working to help their horses learn balance and suppleness.
  - metal type, rotation on bars of mouth, purpose of the curb chain/cavesson, types of reins, types of headstalls and where they apply pressure on the face

## **Potential Impacts:**

- Increase respect for quiet hands.
- Increase inquisitive nature when observing other riders and their bits of choice
- Increase understanding and critical considerations when trying to finish their projects through perfecting balance and maneuvers, improve open-mindedness to consider new tools.

In the camp review some participants were undecided about their level of fulfillment with one-on-one instruction from camp coordinators and/or guest trainers.

# Suggestion:

- When breaking for small group exercises and training utilize the natural separation of experience levels among riders and/or common areas of weakness in horses (i.e. stiff, heavily one sided, flighty, lazy, etc.).
  - Be wary of causing "in" and "out" groups, don't make riders feel "stuck" or confined to a specific group throughout the duration of the camp.
- Ensure that each participant is able to successfully complete an exercise; thereby boosting moral and increasing adoption of camp suggested practices.

# **Potential Impact:**

- Help individuals feel valued, thereby increasing motivation to adopt changes.
- Increase the opportunity for participants to find new limits with their horsemanship capabilities.

# Recommendations for future evaluation designs

- Ensure knowledge test(s) accurately follow curriculum.
- Incorporate questions that allow participants to explain why they selected responses through open ended answers.
  - o i.e. I feel this way about the camp experience because:

• Inquire why participants choose to join the camp.

- O bo they plan to return the following year?
- Include a component for returning campers to describe change in their competitiveness and longevity with horse projects measure long term impacts.
  - o They do they relate these changes to camp experiences?
- Demographics could include description of discipline interests
  - o i.e.: English, performance, speed, ranch

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# Article 1: Appendix G

2016 Horse 4-H Summer Camp Evaluation Vignette



# 2016 4-H Equine Summer Camp Evalution Report Overview

# Camp Goal

Provide 4-H club members with expert guidance to enhance horsemanship skills and diminish unsafe practices; ultimately increasing members' desire to continue involvment with equine projects.

# **Objectives**

knowledge of safety horsemanship practices as principles they relate to the 4-H horse program

provide educational resources to reduce struggles

# Conclusions

Active equine 4-H members lack proper

horsemanship skills; therefore, are unsafe and/or struggle with horse projects. These

struggles contribute to increased drop-out

rates among equine 4-H club participants

On Average

Most participants became more knowledgeable & broadened their perspective of educational resources

as they approach 19 years old.

# KASA

Confidence levels were raised in most horsemanship skills

High comprehension of lessons provided by guest speakers,/ trainers and farm visits

described the camp as excellent

80%

# Opportunities for Improvement

Tailor instruction to riders' skillsets

Incorporation of educational resources available beyond camp opportunities

# Demographics



87% Female 13% Male

• 11

6 months - 11 years equine experience

• 14• 15

13

1718

AGE

Chapter 4

Article 2

# Implementation Factors and Communication Aptness of Arkansas Horse 4-H Clubs According to Associated Stakeholders

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#### Abstract

This qualitative study assessed perspectives of Arkansas horse 4-H club stakeholders (N = 14) to identify implementation factors presented by club members, program staff, communities and determined program outcomes. Stakeholders included county agents (n = 6), volunteer leaders (n = 6)=4), and parents of active members (n=4), from highly and poorly motivated clubs. Data collection and analysis followed interview guides to identify emergent themes. Stakeholders described need for supportive parents, safe horses, and inexpensive competitive/educational opportunities for optimum experience among youth with diverse backgrounds. The level of support provided to volunteer leaders by Extension staff and/or parents effects leaders' ability to serve many roles in club facilitation. Geographic location and resources available in communities influence club opportunities. Horse 4-H clubs are not equally active in communities. According to stakeholders, all clubs provide positive youth influences, a source of motivation to re-invest in the program. Stakeholders commonly receive information about club opportunities through email and share club opportunities with multiple audiences through a variety of communication channels. Stakeholders seek a variety of equine-related information and knowledge from the state's Extension headquarters, personal resources, and youths' educational opportunities. Recommendations for program improvement and future research provided.

Keywords: assessment, communications, horse 4-H club, implementation issues framework

The Cooperative Extension Service has acted as a liaison of knowledge between land grant universities and American communities for over 100 years (Rasmussen, 1989). As the nation evolved through ages of agriculture, war, economic depression, industrialization, and now, primarily urban societies, Extension adapted with aim to continue supporting the needs of people (United States Department of Agriculture, n.d.). Extension professionals have stated the need to remain innovative to continue serving the needs and interests of today's vast, diverse population (Argabright, McGuire, & King, 2012; Borden, Perkins, & Hawkey, 2014; Haas, Mincemoyer, & Perkins, 2015; West, Drake, & Londo, 2009).

The 2016-2020 American Association for Agricultural Education National Research Agenda features 10 high priority research questions for the nation, and half focus on evaluating methods, models, and programs (Roberts, Harder, & Brashears, 2016). Evolving stakeholder interests, funding cuts, and the need for greater efficiency have led Extension professionals to scrutinize programs (Merten, Williams, Carter, & Lehman, 2014; West et al., 2009). The review of program implementation practices has been found to improve coordinators' ability to replicate programs and outcomes (Duerden & Witt, 2012).

In the nature of adaptability, Abell, Cummings, Duke, and Marshall (2015), challenge evaluators to look beyond the logic model of programs and consider social constructs that potentially affect program implementation in the Implementation Issues Framework (IIF). IIF illustrates the presence participants, program staff, organizational climate, communities, and program outcomes uphold in actual program implementation (Abell et al., 2015). According to Abell and colleagues (2015), the characteristics, social circumstances and needs of program participants may alter actual program implementation. The experience, interests, competencies, and professional capacity of program staff and organizational work environment may alter actual

program implementation (Abell et al., 2015). A community's level of involvement with a program, available resources, and culture may alter program implementation (Abell et al., 2015). And finally, as illustrated in Figure 1, short term and long term program outcomes may feed back into the social spheres of participants, program staff, organizational climate, and communities to impact current program implementation (Abell et al., 2015). Moreover, each sphere has the potential to influence other spheres.

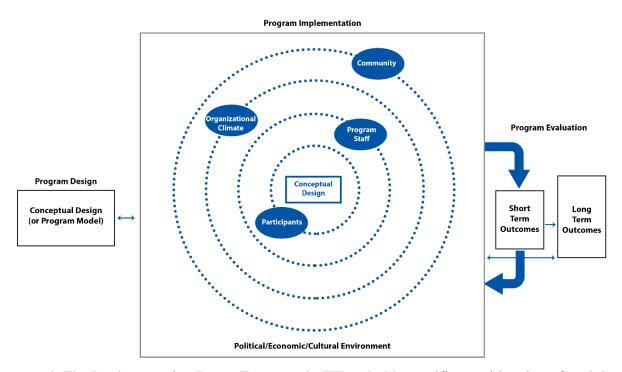


Figure 1. The Implementation Issues Framework (IIF) upholds specific consideration of social factors that affect program implementation practices, and consequently, program outcomes. Reprinted from "A framework for identifying implementation issues affecting extension human sciences programming" by E. Abell, R. Cummings, A. M. Duke, & J. W. Marshall, (2015), Journal of Extension, 53(5).

In addition to consideration of social factors affecting program implementation (Abell et al., 2015), West and colleagues (2009) discussed the need to review communication practices during formative and summative evaluation to review educational practices. The intricate system

of elements involved with communication as information travels from a source, to a receiver, is illustrated in Berlo's Source-Message-Channel-Receiver (SMCR) Model of Communication (1960). In conclusion, the IIF and SMCR models each express the success of an organized effort lies largely in the awareness of associated influences (Abell et al., 2015; Berlo, 1960).

Program stakeholders influence program implementation, outcomes, and evaluation. Many researchers have discussed the critical role and impact stakeholders have in evaluation-type processes as a source of program input (Diaz, Jayaratne, Bardon, & Hazel, 2014), elements of power (Wholey, Hatry, & Newcomer, 2010), and a major audience of evaluation reports (Connors, 2012; Wholey et al., 2010). Moreover, reviewing and reporting program impacts are a method of increasing stakeholder support (Homan, Dick, & Hedrick, 2007; Hedrick, Homan, & Dick, 2009; Merten et al., 2014; West et al., 2009).

#### **Statement of the Problem**

The Arkansas horse 4-H program has been advised by an equine specialist since 2005 (Equine Program Staff, 2008); however, time and resources have limited the Division of Agriculture's (UAEX) ability to formally document any factors associated with programs (M. Russell, personal communication, March 8, 2016). Therefore, program administrators have limited insight on horse 4-H club (horse club) stakeholders, activities, and actual program outcomes.

Although substantial evidence of horse 4-H club outcomes is provided in previous research, limited insight is available on factors affecting program implementation (Anderson & Kar-Lillienthal, 2011; Arnold & Nott, 2010; Cole, 2005; Pendry & Roeter, 2011; Pendry, Roeter, Smith, Jacobson, & Erdman, 2013; Saunders-Ferguson, Barnett, Culen, & TenBroeck, 2008, etc.). Researchers have described volunteer leader training opportunities (Cottle & D'Angelo,

2015; Walker, Cater, Davis, & Fox, 2017), teaching resources (Bailey, Waite, & Wilson, 2013; Greene & Dawson, 2002), conflict resolution methods (Arnold & Nott, 2012; Deen, 2000), and profiling (Rusk, Kerr, Talbert, & Russell, 2001) associated with horse clubs in previous studies. Although volunteer leaders are a valuable stakeholder, UAEX's need to learn more about multiple levels of program factors was not wholly attainable through previous research methods or findings among horse 4-H programs.

# **Purpose of the Study**

This qualitative study sought purposive interviews with county agents, volunteer leaders, and parents associated with the Arkansas horse 4-H clubs to capture the essence of club implementation. The following objectives guided the study:

- 1) Describe factors associated with program participants, staff, and community.
- 2) Describe current program outcomes.
- 3) Identify sources, channels, messages, and receivers of club and equine information.

## Methods

The Arkansas Extension equine specialist, a panel of four Extension experts, one active volunteer leader of a horse club, and one parent of an active horse club member guided researchers to develop interview protocols for this qualitative study. Credibility was established through a peer debriefing session with a staff chair county agent, located within a core urban area (U. S. Census, 2016; U. S. Census, 2015), whose county did not have a horse-related 4-H club (Lincoln & Guba, 1985).

Interview guides included a set of universal questions for all audiences. Each audience type (county agent, volunteer leader, and parent) also received a set of tailored inquiries.

Participants were provided the opportunity to discuss experiences, communication aptness,

communication preference, opportunities, barriers, relationships, motivation, and volunteer leadership associated with their horse club. Some re-ordering of questions occurred throughout interviews to enhance consistency in the conversational tone and flow.

Purposive selection and identification of county agents was followed by chain referral of volunteer leaders and parents. First, the state equine specialist identified two categories of horse clubs. "Highly motivated" clubs were perceived to be thriving, growing, and competitive. On the other hand, "poorly motivated" clubs were perceived to have decreasing or low membership and non-participatory in competitions. At the time of this study, the state equine specialist approximated 10 highly motivated clubs and seven poorly motivated clubs were present in the state. The state equine specialist then produced a list of county agents affiliated with one highly motivated, and one poorly motivated club for each of the three districts in the state. Next, recruited county agents referred researchers to one volunteer leader, and recruited volunteer leaders referred researchers to one parent involved with their respective horse club.

Researchers selected 18 participants (six interviews from each district, three from highly motivated clubs and three from poorly motivated clubs) for representative audience coverage (Patton, 2015). Data saturation occurred at interview 14 (Merriam, 2009). Table 1 identifies participants' audience type, location, and club motivation level.

Participants Recruited According to Motivation Label and District (N = 14).

Table 1.

	Delta	Ouachita	Ozark	
	Highly Motivated Club:	Highly Motivated Club:	Highly Motivated Club:	
	CA, VL, P	CA, P	CA, VL	
	Poorly Motivated Club:	Poorly Motivated Club:	Poorly Motivated Club:	
	CA, VL, P	CA	CA, VL, P	
Total	6	3	5	

*Note.* CA = county agent, VL = volunteer leader, P = parent of active horse club member.

The state 4-H program director initially supported researchers to contact selected county agents with an email requesting response to the carbon copied primary researcher. After five business days of non-response, the primary researcher sent a follow-up email request. One week after the second email request, the primary researcher called the recruits' office once per week, leaving a message until two-way communication was established. One county agent required five weeks' contacting to connect; however, recruitment typically only required two weeks.

Volunteer leader contact information was requested from county agents, followed by requesting parent contact from each volunteer leader. Participants identified through chain referral processes were primarily contacted through telephone calls in the morning hours or after normal business hours once per week until two-way communication was established. Volunteer leaders and parents were commonly recruited within three weeks.

Two county agents reported horse clubs no longer existed in their counties, one volunteer leader and two parents did not return calls, and one parent was considered exhausted after rescheduling three times followed by unanswered calls. All recruits were provided the opportunity to schedule an interview with the primary researcher at a time and date of their

convenience. Although the chain referral system required vigilant recruitment efforts, it provided a source of information otherwise unavailable for research efforts (Biernacki & Waldorf, 1981).

Interviews were captured from June to August 2016 and digitally recorded. The primary researcher traveled to two district O-RAMA competitions and the state 4-H horse show to conduct face-to-face interviews (n = 5). Telephone interviews (n = 9) were conducted with participants who had scheduling conflicts or did not attend the events. Participants completed telephone interviews from their workplaces and homes during and after normal business hours. Telephone interviews averaged 25 minutes whereas in-person interviews required an additional 10 minutes to establish rapport and navigate extenuating interruptions of the show environment. Face-to-face interviews often occurred in semi-private places near competitive events. All participants provided verbal consent prior to the researcher following the semi-structured interview guides approved by the University of Arkansas Institutional Review Board.

Digitally recorded interviews were transcribed verbatim by a third party transcription service. Upon return, transcriptions were reviewed for accuracy by the interviewer. Team discussion of intention, disposition, and instrument development and written logs were utilized to maintain dependability of the study (Lincoln & Guba, 1985). Initial open coding in NVivo version 11 for Windows© followed interview scripts for node development until emergent themes and axial coding developed additional primary nodes and child nodes (Creswell, 2014). Inter-coder agreement was established between two researchers (Creswell, 2014).

Codes and keywords were kept in context and descriptive summaries were maintained throughout node creation. NVivo tools such as word clouds and comparison diagrams were used to further explore data. All nodes were printed, reviewed, and hand coded to calculate word frequencies and ensure coding accuracy. Category themes are identified in UPPERCASE with

the most supported category noted in **bold.** Properties, also referred to as sub categories, that support categories are *italicized*, and categories lacking supportive properties are unnoted (Creswell, 2014).

Participants were coded to secure anonymity; however, district, audience type, and club motivational level were maintained to preserve the opportunity to identify relationships throughout analysis. Each participant received a code in which the first letter represented the district: "D" Delta, "O" Ouachita, or "Z" Ozark. The second letter represented the audience type as "C" county agent, "V" volunteer leader, or "P" parent, followed by the number "1" for highly motivated clubs or "2" for poorly motivated clubs.

#### Results

One county agent had less than one year of experience serving UAEX while the most experienced agent reported 17 years' experience as a county agent. Experience as a horse club volunteer leader ranged from three to eight years and participants' each had more than 12 years' experience with 4-H. Parents' experience with 4-H ranged from four to 10-plus years. One-half of participants grew up with horses, having been involved since childhood (n = 7). Two parents and one volunteer leader had less than 10 years' experience in the horse industry and two county agents said they had little or no experience. Additional demographic information provided in Table 2.

Demographics Characteristics of Interview Participants (N = 14)

			Age	Avg. Years	Avg. Years	Avg. Years Horse
Audience	n	Gender	Range	Role Exp.	4-H Exp.	Industry Exp.
County Agents						
	3	M	31-45	14.0	14.3	15.3
	3	F	25-35	7.5	18.0	3.3
Volunteer Leaders						
	1	M	48	1.0	7.0	7.0
	3	F	38-59.5	13.5	26.7	39.0
<u>Parents</u>						
	2	M	47-52	_	7.5	26.5
	2	F	32-41	_	6.0	10.0

*Note.* M = Male; F = Female; Avg. = Average; Exp. = Experience.

# **Club Participants**

Table 2.

# Level of involvement.

Horse clubs averaged 23 total members (min. 15, max. 40) with an average of 17 highly active members (min. 7, max. 25). Researchers aimed to collect interviews from stakeholders' with active horse clubs; however, one interviewee reported an inactive club (OC2). Participants reported member participation in county (n = 3), district (n = 5), and state (n = 4) level horse shows including hippology and horse judging events (n = 2). One agent described the diversity of her club, which included brand-new beginners, as well as competitors in halter, ranch, speed, and English disciplines (OC1). One volunteer leader mentioned the incorporation of clover buds in monthly meetings and riding practices as an effort to foster future interest in the club and competitions (DV2).

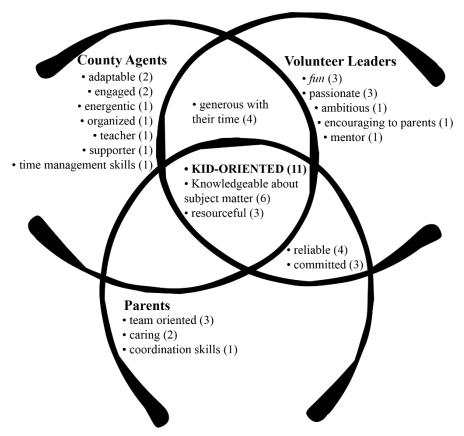
# Present challenges.

All audiences referenced **EXPENSE** (n = 9) as a barrier for members of their club. More specifically, the *cost of horse ownership* (n = 4), according to county agents and parents. All audiences also mentioned youth can be negatively impacted by a LACK OF SUPPORT at the *parental* (n = 3) level. Volunteer leaders most frequently reported many extra-curricular activities compete for youths' time (n = 3). One county agent also mentioned the need for more "kid safe" horses (OC2).

# **Program Staff**

# Volunteer leaders.

When asked to describe the characteristics of a successful horse club, county agents most commonly stated success hinged on the **VOLUNTEER LEADER** (n = 4). County agents (n = 3), volunteer leaders (n = 6), and parents (n = 2) most commonly described successful volunteer leaders must be **KID ORIENTED** (n = 11). Additional responses are described in Figure 2.

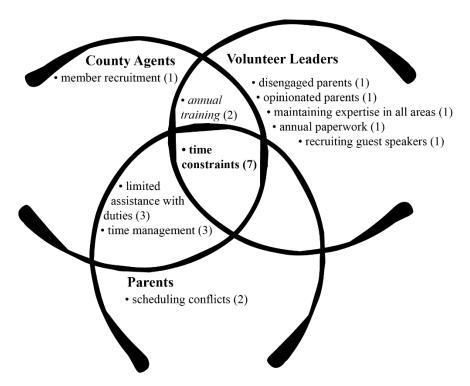


*Figure 2.* Characteristics of a successful horse club volunteer leader according to county agents, volunteer leaders, and parents of youth in Arkansas horse 4-H clubs.

Stakeholders most commonly stated volunteer leaders provide STRUCTURE AND GUIDANCE (n = 2), handle scheduling (n = 2), and serve as the source of communication (n = 2) in a horse club. In addition, county agents described the role of volunteer leaders as the source of engagement and activity (n = 3) and as an equine experts (n = 2). In addition, volunteer leaders felt responsible for making sure activities and meetings were "interesting" (DV1) and to "be encouraging" to youth (ZV2). County agents stated the club would be "very hard" without a volunteer leader (DC1) as leaders are, "...the most valuable component of the club" (DC2).

All audiences were provided the opportunity to describe current challenges of club leaders. **Time constraints** were most frequently reported by county agents (n = 3) and volunteer

leaders (n = 3), including making time for *annual training* (n = 2). Parents most frequently described leaders' challenge to navigate schedule conflicts (n = 2). One leader specifically discussed her struggle to help members complete annual registration through the online format, she felt inadequately supported (ZV2). Additional responses are detailed in Figure 3.



*Figure 3*. Challenges county agents, volunteer leaders, and parents of youth in Arkansas horse 4-H clubs perceive to be associated with volunteer leaders of their clubs.

All audiences were provided the opportunity to describe any specific resources or aides that would enable volunteer leaders to be more successful. The need for **TRAINING** was most commonly reported by county agents (n = 5) and volunteer leaders (n = 3) and the need for supplies was most commonly reported by parents (n = 2). In addition, county agents and volunteer leaders both reported the need for teaching aides (n = 2) while volunteer leaders and parents both reported the need for funding (n = 3). Additional responses are detailed in Figure 4.

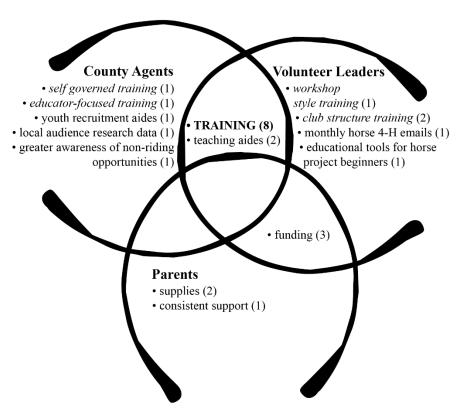


Figure 4. Needs county agents, volunteer leaders, and parents of youth in Arkansas horse 4-H clubs perceive to be associated with volunteer leaders of their clubs.

# County agents.

County agents described their role with the horse club included **SUPPORT** (n = 8) with registration and enrollment (n = 3), meetings (n = 2), additional funding (DC2), ORAMAs and competitions (ZC1), and to stay involved while "staying out of the way" (OC1). Multiple agents also mentioned the need to PROVIDE INFORMATION (n = 5) for clubs such as identifying local resources (e.g. guest speakers) (n = 2). Two county agents described having little or no experience in the horse industry, two agents had some experience, and two described lifelong experience.

County agents discussed *lack of available funding* (n = 2) and *lack of time* (n = 3) as present challenges when working with their horse clubs. One county agent explained, "...the

youth aspect is one part of his job... and then under 4-H, the equine is a little piece of the puzzle" (OC2). Another county agent with mixed appointments stated, "...it's very difficult to handle all the agriculture in the county and then handle the 4-H club..." (DC2).

# Relationships among program staff.

Multiple participants specifically remarked the impacts of *county agent focus* (n = 4). Volunteer leaders with agriculture focused agents described "…a difference in personalities and interests…" (ZV2) and "… they're not very involved…" (DV2). On the other hand, volunteer leaders with 4-H focused agents reported **POSTIVE RELATIONSHIPS** (n = 3).

All county agents and parents described **POSITIVE RELATIONSHIPS** (n = 9) with volunteer leaders. When asked about methods of volunteer leader management, one agent chuckled and stated, "You don't manage them; you just try to contain them. You just keep them on track and keep them up-to-date with what's going on so that they don't miss any deadlines" (DC2). Another agent described having little interaction with leaders stating, "...in the past, our 4-H program assistant had handled [member enrollment] more than me" (ZC2). According to parents, county agents maintain good (n = 2) and non-existent relationships with parents (n = 1). ZP2 stated, "...I'm not even sure who [county agent] is so... I guess [our relationship] would be fine" (ZP2).

# Horse club experience.

Both county agents and volunteer leaders described a **POSITIVE EXPERIENCE** (n = 6) with their horse club. County agents most commonly stated good (n = 2) or learning experiences (n = 2) in addition to enjoyable (n = 1) and active (n = 1). One county agent referred to his experience as "limited" (ZC2). Volunteer leaders described their experience with the horse club as good (n = 1), positive (n = 1), and spanning many years (n = 1).

# **Community Factors**

All audiences were provided the opportunity to describe barriers they perceive to stifle opportunities for their club. Volunteer leaders and parents reported *insufficient parental support* (n = 3), and one county agent reported *insufficient community support* (OC1). All audiences referred to the requirement of **SUPPORTIVE PARENTS** (n = 3) to develop a successful club. Four parent interviewees identified the prominence of 4-H activities and events in their personal lifestyle as "high on the list" (n = 2), "top of our lifestyle" (DP1), and "important" (ZP2).

Communities without club activities or competitions caused challenges for clubs due to **EXPENSE** associated with traveling (n = 2). One volunteer leader discussed facing the logistics of hauling horses from mountainous regions to available 4-H competitions (ZV2). A second volunteer leader from the same geographic area described the feat of transporting a large animal to meetings (ZV1). "The biggest barrier we have is the lack of ability to actually to do hands on learning projects simply because of the fact that you're dealing with a horse… you can bring chickens and rabbits to a meeting… with a horse its' a little different" (ZV1). Some communities have limited riding facilities which result in weather conflicts (n = 3).

# **Program Outcomes**

### Youth benefits.

All audiences were provided the opportunity to describe any impacts they perceive youth to receive by being members of their associated horse club. County agents (n = 3) most frequently reported *general life skills*, whereas volunteer leaders (n = 3) and parents (n = 2) most frequently reported *general exposure*. County agents, volunteer leaders and parents all reported **LIFE SKILLS** (n = 11) and EDUCATION (n = 4). Parents and volunteer leaders both described

that youth are positively impacted by EXPOSURE (n = 6). Additional responses detailed in Figure 5.

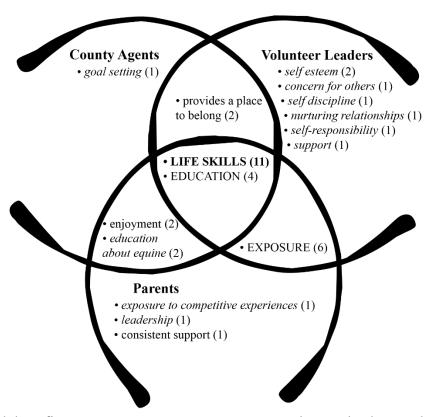


Figure 5. Youth benefit program outcomes county agents, volunteer leaders, and parents of youth in Arkansas horse 4-H clubs perceive to be associated with their horse clubs.

A volunteer leader explained how youths have opportunities to gain responsibilities through their horse projects and non-riding events such as speeches, an outcome she witnessed help previous members, as they grew older and progressed through school (DV1). Volunteer leaders were most commonly motivated to continue involvement with their horse club by **YOUTH** (n = 4). One participant described, "We don't always win in life; we lose more than we win. We watch people's kids be confident enough that they can lose with the dignity and respect" (ZV1). County agents most frequently chose to be involved with 4-H to make a

**POSITIVE IMPACT ON YOUTH** (n = 4). Additional responses ranged from "I really love 4-H" (DC1) to "It's part of our job" (OC2).

# Community benefits.

**COMMUNITY SERVICE** (n = 8) and EDUCATIONAL OPPORTUNITIES (n = 3) were the most common community impacts described by participants. One club organized an annual reduced-rate clinic for routine healthcare such as Coggins testing and vaccination (OC1), another club provided an opportunity for community members to interact and even ride horses through an event called "Fun Days" (ZP2). Horse clubs were also described as active in the community through *charity events* (n = 4), *parades* (n = 2), county horse show or playdays (n = 2), local media outlets (n = 2), *volunteering to staff community events*, *local nonprofits* and *caroling at the local nursing homes* (OP1). In addition, another club provided *staff* and *exhibits* for a community petting zoo (DV1).

# Sources, Messages, Channels, and Receivers of Club and Horse-Related Information Receiving club opportunities.

County agents most frequently receive information about club opportunities from the **state office** (n = 5) through email (n = 5). Volunteer leaders most frequently receive information about club opportunities from county agents (n = 3) through email (n = 3). Participants least frequently sought information from the youth and development section of UAEX website (n = 1) and 4-H Online (n = 1). Additional responses are outlined in Figure 6. County agents and volunteer leaders offered suggestions for improved communication practices when learning about club opportunities including the following: improve timeliness (n = 2), improve website navigations (n = 2), and greater consistency between calendars and webpages (n = 1).

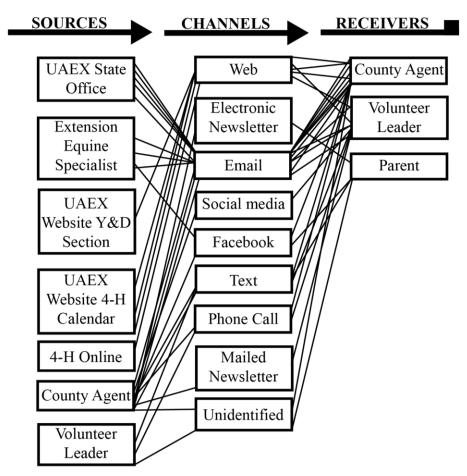


Figure 6. Incoming communication channels and sources associated with gaining information about horse club opportunities according to county agents, volunteer leaders, and parents associated with Arkansas horse 4-H clubs. Lines illustrate the paths of communication described by participants.

*Note.* Y&D = youth and development.

# Sharing club opportunities.

County agents reported using more than ten types of communication channels (n = 11) to disseminate information about club opportunities including the following: 4-H newsletters (n = 2), phone calls (n = 2), text messages (n = 2), local newspaper, local television, magazines, Facebook, local radio, the county website (DC1), word-of-mouth (DC2), and email (OC1). A county agent (DC1) from a highly motivated club described using six channels (newspaper,

television, magazines, Facebook, radio, and county website) whereas a county agent from a poorly motivated club reported using only the 4-H newsletter (ZC2) to share information about club opportunities. Target audiences included the horse club (n = 2), volunteer leader of the club (n = 2), and the community (DC1). Participants reported messages such as 4-H club opportunities (n = 2), positive outreach (DC1), registration and deadlines (DC2), community opportunities such as clinics, meetings or seminars, calendar of events (OC1), and volunteer leader recruitment (OC2). Additional responses are illustrated in Figure 7.

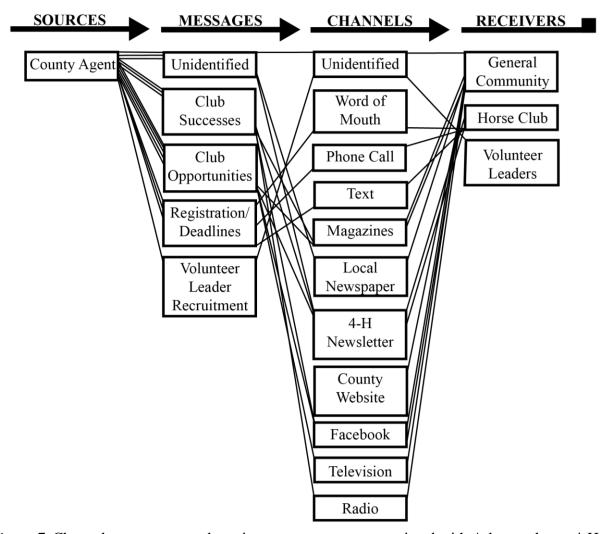


Figure 7. Channels, messages, and receivers county agents associated with Arkansas horse 4-H clubs utilize to share club related information. Lines illustrate the paths of communication described by participants.

# Acquiring horse-related information.

County agents primarily leaned on **UAEX** (n = 6) through the *UAEX website* (n = 2), state equine specialist (n = 2), state veterinarian (OC1), or social media outlets (DC1) for horse-related information. Volunteer leaders sought information from members in the community with horse experience (n = 2), guest lecturers, literature/books and simply "online" (ZV2). Parents provided the widest array of informational sources (10 sources). All parents made at least one reference to gathering information through **4-H EXPERIENCES WITH THEIR CHILD** such as *shows* (n = 2), guest lectures/seminars/clinics (n = 2), and studying for competitions (n = 1). County agents most commonly sought information regarding horse **MAINTENANCE AND HEALTH** (n = 8), and volunteer leaders most commonly sought information about training (n = 3) and non-riding events (n = 3). Additional responses are detailed in Figure 8.

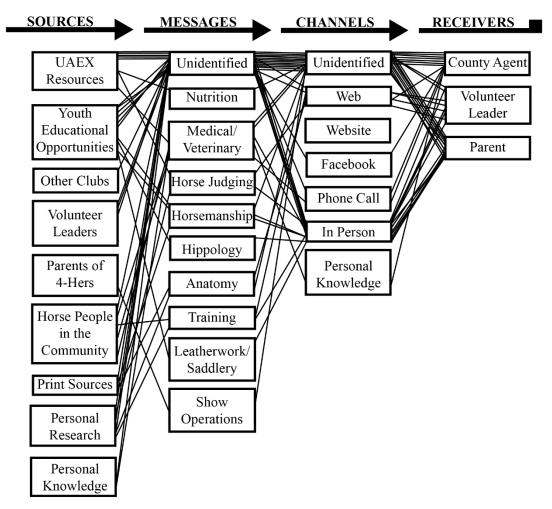


Figure 8. Sources, channels and messages described by county agents, volunteer leaders, and parents of Arkansas horse 4-H clubs to gain horse-related knowledge. Lines illustrate the paths of communication described by participants.

# Sharing horse-related information.

County agents reported sharing horse facts through walk-in/in-person visits (n = 3), social media (n = 2), phone calls (n = 2), email (n = 2), text messages (n = 1), and monthly newsletter (n = 1). County agents commonly shared information with volunteer leaders, parents, and prospective club members. One county agent stated horse-related information is "... not really a focus" (ZC2).

#### Limitations

Limitations to the study included conducting recruitment efforts during the summer months of June to August 2016, an incredibly busy time of year for Extension staff and the equine community. In addition, interviews were commonly time sensitive and some participants did not have the opportunity to answer all questions on the interview protocol due to time constraints, bad cell phone service, unexpected interruptions, or the distraction of prior obligations (n = 4). In the nature of purposively selected interviewees, findings of the study are not generalizable to a larger population (Lincoln & Guba, 1985).

# **Conclusions and Implications**

# **Participants**

Diversity was present in club involvement, equine experience, and age of participants, all factors previous research has shown to influence life skill development (Haas et al., 2015).

Participants described supportive parents and safe horses are enabling factors for youth in the mixed environment. Financial constraints can limit participants' experience with the horse program.

# **Program Staff**

# County agents.

Major differences were present in age, experience serving the position, and equine experience of county agents. Most female county agents were younger than males in the position, with half the average years of experience serving UAEX, and approximately one-fifth the average years of equine industry experience. Therefore, new agents who are also new to horses serve some counties. In addition, time constraints, lack of expertise, or disinterest limits the support and information county agents with split appointments provide. Meanwhile, other county

agents reported many years of experience in their position, 4-H, and the equine industry. County agents experienced multiple levels of involvement with horse clubs including, limited, learning, and active. Some agents described a passion for 4-H and others reported it was a job requirement. All county agents appreciated the service provided by volunteer leaders.

### Volunteer leaders.

A wide breadth of experience in the position, 4-H and the equine industry were present in volunteer leaders. One interviewee had only one year of experience as volunteer leader, with seven years of experience with 4-H and the equine industry, whereas the most experienced volunteer leader had greater than 15 years of experience in the position, and over 30 years' experience with 4-H and the equine industry. Volunteer leaders primarily reported positive, sometimes long experiences with their horse club.

Stakeholders identified the success of a club hinges largely on volunteer leaders' ability to relate to youth, expertise with horses and 4-H clubs, level of investment in the club, and level of responsibility. As leaders, volunteers must also have the ability to manage the group including scheduling and communication. Many participants reported volunteers lack sufficient support to manage all duties and would benefit from more invested parents or co-leaders.

Volunteer leaders are most commonly challenged by time constraints, in response; multiple stakeholders suggested training to foster greater impact and efficiency. Training was also suggested to be available at leaders' convenience. Findings suggest that leaders often spend time on youth recruitment, researching club opportunities, developing educational tools for beginners, and developing lessons. Volunteer leaders and parents felt leaders need additional funding and parents specifically mentioned leaders need supplies. These findings suggest volunteer leaders spend too much time/effort fundraising and gathering supplies for club

activities or youths' needs. As county agents provide volunteer leaders with higher levels of support, relationships become more positive.

# Community

Male parents averaged more than 20 years' experience in the horse industry, and female parents averaged 10 years' experience, yet primarily reported gaining horse knowledge through youth experiences/opportunities. These findings suggest parents who participated in interviews reflect lifelong learning values. On average, parents had less than 10 years' experience with 4-H.

Some communities have limited resources to support horse clubs including facilities for meetings and riding. The diverse landscape of Arkansas means some clubs face the geographic barrier of mountainous terrain. In addition, some communities do not offer local horse 4-H opportunities, which accentuates the financial barrier expressed among some participants.

# **Program Outcomes**

All stakeholders described youth gaining life skills from horse clubs. In return, the awareness of improved life skills among youth motivate most program staff to continue involvement with the program. Program participants only receive exposure to available opportunities within their budget. Clubs provide a diverse array of community service and educational opportunities for communities, and are not active at the same level within their communities. Both participant and community outcome factors may affect actual club outcomes as clubs are implemented in multiple locations throughout the state (Abell et al., 2015).

## **SMCR**

# Club opportunities.

County agents and volunteer leaders prefer to receive information through email rather than navigating websites, which may reflect the preference for immediacy as program staff deal

with time constraints. County agents primarily rely on UAEX and volunteer leaders primarily rely on county agents for information about club opportunities. Program staff share club opportunities with club participants and communities through many communication channels.

### Horse-related information.

County agents primarily rely on UAEX to gain knowledge about proper horse care through websites and personal contacts. Volunteer leaders primarily learn about training and non-riding opportunities for youth through personal and published resources. Meanwhile, parents use the greatest variety of communication channels; however, parents primarily gained knowledge through 4-H experiences with their child. County agents share information through many channels to many audiences. Findings suggest the county staff are serving diverse urban and rural societies as well as many generations.

#### Recommendations

Overall, participants have the potential to impact program implementation through their level of involvement, financial capabilities and capacity to manage a horse project. Program staff have the potential to impact implementation through their level of experience in 4-H and the equine industry, availability, and level of support. Communities have the potential to impact program implementation due to geographic location, and availability of local resources such as a riding facility. Program outcomes recycle through program implementation and provide a source of motivation for program staff.

Findings suggest the need to evaluate the Arkansas horse 4-H program at a statewide level to assess impacts of identified factors throughout diverse socio-economic and geographic areas of the state. Results of a statewide study may pinpoint areas of greatest strength and

weakness in program implementation, and develop an action plan to improve practice and outcomes (West et al., 2009).

In 2001, Cooper and Graham conducted a study within the population of Arkansas county agents and supervisors and found 57 required core competencies Extension staff perceived to be associated with their positions. Fundraising was not a required competency according to active county agents and supervisors in Arkansas. Therefore, fundraising resource needs may exist among program staff associated with clubs of members with financial limitations. Findings and prior research suggest the need to explore barriers to fundraising through additional research.

Great diversity in personal backgrounds and professional experiences of county agents and volunteer leaders associated with Arkansas horse clubs, and few discussed volunteer leader management practices beyond acting as a source of information or administrative support. Hahn (1979, as cited in Seevers & Graham, 2012) found volunteer management a vital competency of all Extension staff. Therefore, findings suggest county agents should be encouraged to seek greater support from volunteer leader management models (ISOTURE, L-O-O-P, G.E.M.S., etc.) to more adequately support leaders' needs and interests, and ultimately, improve program outcomes (Seevers & Graham, 2012).

Communicating information about club opportunities occurs through many channels, to many audiences. Additional research through a statewide assessment of communication practices and preferences should use staffs' perceptions to identify the most effective internal and external communication strategies with respect to cost, timeliness and convenience (Weigel, 1994). Weigel (1994), found including staffs' perceptions and input to evolve communication practices improved morale and adoption.

Recommendations for future research include conducting interviews during an off-season to more-closely follow interview protocols and reduce time constraints. Abell and colleagues (2015) sought to provide a "common language" for program facilitators and researchers to develop and review program implementation through the IIF (para. 24). Researchers found the IIF provided a valuable foundation to explore social factors associated with stakeholders of the Arkansas horse 4-H program. Moreover, research findings generated informed decisions for program improvement and replication throughout diverse audiences and geographic locations as suggested by Abell and colleagues (2015).

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**Article 2: Appendices** 

Article 2: Appendix A.

IRB Approval



Office of Research Compliance Institutional Review Board

October 26, 2016

MEMORANDUM	
TO:	Fawn Kurtzo Leslie Edgar Mark Russell Donna Graham
FROM:	Ro Windwalker IRB Coordinator
RE:	PROJECT MODIFICATION
IRB Protocol #:	16-05-754
Protocol Title:	Knowledge, Perceptions and Attitudes of the Arkansas Equine 4-H Program
Review Type:	☐ EXEMPT ⊠ EXPEDITED ☐ FULL IRB
Approved Project Period:	Start Date: 10/24/2016 Expiration Date: 05/30/2017
Your request to modify the r	referenced protocol has been approved by the IRB. This protocol is

Your request to modify the referenced protocol has been approved by the IRB. This protocol is currently approved for 240 total participants. If you wish to make any further modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

Please note that this approval does not extend the Approved Project Period. Should you wish to extend your project beyond the current expiration date, you must submit a request for continuation using the UAF IRB form "Continuing Review for IRB Approved Projects." The request should be sent to the IRB Coordinator, 109 MLKG Building.

For protocols requiring FULL IRB review, please submit your request at least one month prior to the current expiration date. (High-risk protocols may require even more time for approval.) For protocols requiring an EXPEDITED or EXEMPT review, submit your request at least two weeks prior to the current expiration date. Failure to obtain approval for a continuation *on or prior to* the currently approved expiration date will result in termination of the protocol and you will be required to submit a new protocol to the IRB before continuing the project. Data collected past the protocol expiration date may need to be eliminated from the dataset should you wish to publish. Only data collected under a currently approved protocol can be certified by the IRB for any purpose.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.

109 MLKG • 1 University of Arkansas • Fayetteville, AR 72701-1201 • (479) 575-2208 • Fax (479) 575-6527 • Email irb@uark.edu

The University of Arkansas is an equal opportunity/affirmative action institution.

Article 2: Appendix B.

Stakeholder Interview Initial Email Recruitment

From: 4-H Program Director Interim Unit Leader

To: Identified County Agents

### Everyone,

You have been identified as a potential participant in a research study conducted by a graduate student from the U of A – Fayetteville. This study focuses on the 4-H Horse Project under the direction of Dr. Mark Russell, Extension Horse Specialist. You have been selected to participate in this study because of your experience in the 4-H horse project. You will be asked to participate in phone or face-to-face interview. If you are unable to participate in this study, please let me know as soon as possible. If you desire to participate, please reply to Fawn at fkurtzo@uark.edu or by phone (see below) to arrange an interview date and time. Below you will find more details on the research study.

[Name] 4-H Program Director Interim Unit Leader

### Dear County Agent,

I am Fawn Kurtzo, a graduate student of Dale Bumpers College of Agricultural, Food and Life Sciences at the University of Arkansas, Fayetteville.

I am reaching out to request your help in a study of county agents, volunteer leaders and parents associated with Arkansas 4-H horse clubs. This study is an effort to gain a ground level perspective on the needs, benefits, opportunities and challenges of your 4-H horse club. The collection of perspectives gained through the interview process will be used to develop a statewide survey for all county agents and volunteer leaders of 4-H horse clubs. I am working with Dr. Mark Russell, assistant professor and state equine specialist, to conduct this study as a component of my master's thesis project.

You have been identified as prospective participant in this study due to your level of involvement in the 4-H horse program. The researchers have purposefully selected county agents with a variety of involvement levels from each district in the state.

Please refer to the attached cover letter for more information about the study. I have also attached a consent form for more information about the researchers and interview process. You are not expected to sign the consent form at this time.

I have contacted you to request:

- an interview with you
- the contact information of one horse 4-H club volunteer leader
- the contact information of one parent of an active horse 4-H club youth member

I will be conducting face-to-face and telephone interviews throughout the summer.

Please contact me via email (fkurtzo@uark.edu) or telephone (XXX-XXXX) to let me know if you would like to accept or decline the opportunity to participate in this study.

We greatly appreciate your consideration and support, and hope to gain your advice and perspective.

Sincerely,

Fawn Kurtzo

Graduate Assistant, Bumpers College Dean's Office University of Arkansas Department of Agricultural Education, Communications and Technology

230 Agriculture Building cell:(XXX)XXX-XXXX

\_\_\_\_\_

[Name]
Program Director
4-H Youth Development
University of Arkansas System
Division of Agriculture
Cooperative Extension Service
XXX-XXX-XXXX

Article 2: Appendix C.

Stakeholder Interview Recruitment Cover Letter



# Department of Agricultural Education, Communications and Technology



205 Agriculture Building, 1 University of Arkansas, Fayetteville, AR 72701-1201 479-575-2035 • Fax: 479-575-2601 • http://aect.uark.edu

Dear [County agent/volunteer leader/parent],

Thank you for your interest in this study. The Division of Agriculture is seeking your advice to better support and understand the current situations equine 4-H clubs throughout the state are facing.

Over the past five years, the state 4-H horse show has experienced exponential growth. In addition, 4-H members now have camps, competitions, and educational opportunities throughout the state specifically dedicated to equine projects. The goal of this study is to learn more about the needs of our volunteer leaders and county agents, the strengths and weaknesses of the programs, and the value our youth and communities gain from equine clubs. In the long run, this research aims to provide valuable feedback and first-hand suggestions to program managers to better guide sustained growth and improvement among equine 4-H clubs at a state-wide level.

This summer, a researcher will be conducting interviews with county agents, volunteer leaders and parents of active members associated with equine 4-H clubs throughout the state. A total of six participants will be selected from the Ozark, Ouachita and Delta regions for this component of the study.

The purpose of interviewing is to describe the needs, benefits, opportunities and challenges of the Arkansas 4-H equine program according to actively involved stakeholders. The results of this interviews seek to guide the development of a survey which will assess similar components at a state-wide level.

Your advice and perspective are highly valued. To learn more about the study or how you can be involved please contact us, we are happy to address any questions, concerns or comments. For questions about one's rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ro Windwalker, the University of Arkansas' Compliance Coordinator, at (479) 575-2208 or email irb@uark.edu.

Sincerely,

Fawn Kurtzo

Graduate Student

Dale Bumpers College of Agriculture,

Food and Life Sciences

University of Arkansas

(XXX) XXX - XXXX

fkurtzo@uark.edu

Mark Russell

Assistant Professor and Equine Specialist

University of Arkansas – Division of

Agriculture

(XXX) XXX - XXXX

Mad Phursell

mrrussell@uaex.edu

Article 2: Appendix D.

Stakeholder Interview Consent Form

## **Consent to Participate in Research**

Study Title: Knowledge, Perceptions and Attitudes of the Arkansas Equine 4-H Program

**Researchers:** Fawn Kurtzo (University of Arkansas), Dr. Mark Russell (U of A Division of Agriculture) and Dr. Leslie Edgar (University of Arkansas)

Please read this consent document carefully before you decide to participate. Your participation is completely voluntary.

**Purpose:** The purpose of this study is to provide an analysis of the Arkansas equine 4-H program according to county agents, volunteer leaders, parents of active club members and active club members.

**Procedures/Tasks:** Upon participant consent, recorded telephone interviews will provide key words and quotes from participants which will result in emergent themes through open-ended conversation. These themes will provide key insights and act as guides for developing a quantitative survey administered to a broader audience of county agents and volunteer leaders associated with equine 4-H clubs in Arkansas.

**Duration:** The interviews will last around 30 minutes.

**Risks and Benefits:** There are no anticipated risks to participating in this study. Benefits include, but are not limited to: improvements in program curriculum, increased support among stakeholders and insight for other equine 4-H programs throughout the nation.

**Confidentiality:** Participants will be kept confidential to the extent allowed by law and University policy and all data will be stored on a password protected computer. No participants will be mentioned in the research findings.

**Incentives:** No incentives provided, but we do appreciate your insights.

**Participant Rights:** Participants may refuse to participate in this study without penalty or loss of benefits to which they are otherwise entitled. You may discontinue participation at any time without penalty or loss of benefits. By signing this form, participants do not give up any personal legal rights they may have as a participant in this study.

Contacts and Questions: For questions, concerns, or complaints about the study you may contact Dr. Leslie Edgar at (XXX) XXX-XXXX, ledgar@uark.edu or Dr. Mark Russell at (XXX) XXX-XXXX, mrrussell@uaex.edu. For questions about one's rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ro Windwalker, the University of Arkansas' Compliance Coordinator, at (479) 575-2208 or email irb@uark.edu.

### Agreeing to the consent form

The participant has read (or someone has read it to them) this form and agrees to allow to participate in the research study. The participant has had the opportunity to ask questions and have had them answered to their satisfaction. The participant voluntarily agrees to participate in this study with the knowledge that recorded responses will be used to gain insight about the nature of equine 4-H clubs in Arkansas.

Verbal Consent of Participant: (name)	Date:
Signature of Person Obtaining Consent:	Date:
Printed Name of Person Obtaining Consent:	

Article 2: Appendix E.

County Agent Telephone Interview Script and Guide

### **Interview Script – County Agents**

Hello		
110110	,	

This is Fawn Kurtzo, I am calling to conduct your telephone interview for the 4-H horse club study.

Is this still a good time for you?

- If yes: great, let's get started!
- If no: reschedule.

Just to be clear I am in a private setting, and I am utilizing speaker phone and a hand held audio recorder to capture our interview today. If at any time you would like to restate or retract an answer that is completely acceptable.

Are you ready to get started?

Move to interview guide.

### **Interviewing Guide:**

The purpose of this study is to capture the essence of perceived needs, benefits, opportunities and challenges of the Arkansas 4-H equine clubs according to county agents, volunteer leaders and parents of active club members. Moreover, this study sought to guide the development of a survey instrument to identify the needs, benefits, opportunities and challenges of Arkansas equine 4-H clubs according to all 4-H county agents and volunteer leaders at a state-wide level. I will ask a series of questions including a universal set of questions for all participants and additional questions tailored for each type of participant: county agents, volunteer leaders and parents.

• Were you able to read and/or be read the consent to research form? By answering yes, you are agreeing to participate in this research study.

This interview guide is structured to create conversation, so before we begin, I want to let you know I will ask all the questions on the interview guide to follow interview protocol. If you feel you have already answered a question, you may let me know or use the opportunity to elaborate on the specific topic.

## I'm now going to ask you a series of open-ended questions:

- Briefly describe your 4-H club in 1 to 2 sentences.
- How would you describe your experience with 4-H horse clubs?
- In your opinion, how do you believe your 4-H horse club impacts youth?
- In your opinion, how do you believe your 4-H horse club impacts the community?
- What are some barriers you've experienced with your current 4-H horse club?
- In your opinion, what characteristics make a 4-H horse club successful?
- In your opinion, what are the characteristics of a successful 4-H club of any type?
- What are some opportunities you see for your 4-H horse club to become more successful?
- How do you currently receive information about 4-H club opportunities?
  - o How could this communication be more convenient?
- What role do you provide in making your 4-H horse club successful?

• What role do you think your volunteer leaders should take in your horse club?

The following questions are specifically structured to discuss volunteer leaders.

- What are characteristics of successful volunteer leaders?
- What value do volunteer leaders add to the 4-H horse club you're involved with?
  - What value do volunteer leaders add to the members?
- What do you perceive to be the greatest hurdle for volunteer leaders?
  - What materials/resources/training would help the leaders?

### Additional Questions (7) for County Agents

- How do you currently receive information about horse facts?
- How do you share information about horse facts?
  - o Email, phone, office walk-ins, youth members, social media, etc.
- Who do you primarily share this information with?
  - o Leaders, parents, youth?
- How do you share information about 4-H club opportunities?
  - o Email, phone, office walk-ins, youth members, social media, etc.
- Who do you primarily share this information with?
  - o Leaders, parents, youth?
- How would you describe your relationship with the 4-H club volunteer leaders?
- What are some of the ways you manage the volunteer leaders of the horse club?
  - o Prompts include: volunteer leadership training, conflict resolution, act as a source of information
- What do you see as your biggest obstacle in volunteer management?
- How would you describe your horse knowledge and skills?
  - o Beginner can catch, lead, and tie
  - Intermediate can tack, load and worm
  - Advanced can administer vaccines, diagnose symptoms of illness or injury

### Opportunity to make additional remarks.

- Is there anything else you would like to add or elaborate on before we conclude the interview with a few demographic questions?
- Now that you've had some time to consider this study, is there anyone else who is involved with 4-H horse clubs you think I should gain a perspective from?

## Demographics Questions (4) All Participants

- How long have you been in your current position as a county agent?
- How long have you been involved in 4-H?
- Why are you involved in 4-H?
- How long have you been involved in the equine industry?
- Age and Gender

Thank you for taking time out of your day to share your experiences and opinions with us. Your participation is greatly appreciated and has provided valuable insight into this topic. Thank you.

Article 2: Appendix F.

Volunteer Leader Telephone Interview Script and Guide

### **Interview Script – Volunteer Leaders**

Hello	
HUIU	

This is Fawn Kurtzo, I am calling to conduct your telephone interview for the equine 4-H club study.

Is this still a good time for you?

- If yes: great, let's get started!
- If no: reschedule.

Just to be clear I am in a private setting, and I am utilizing speaker phone and a hand held audio recorder to capture our interview today. If at any time you would like to restate or retract an answer that is completely acceptable.

Are you ready to get started?

Move to interview guide.

### **Interviewing Guide:**

The purpose of this study is to capture the essence of perceived needs, benefits, opportunities and challenges of the Arkansas 4-H equine clubs according to county agents, volunteer leaders and parents of active club members. Moreover, this study sought to guide the development of a survey instrument to identify the needs, benefits, opportunities and challenges of Arkansas equine 4-H clubs according to all 4-H county agents and volunteer leaders at a state-wide level. I will ask a series of questions including a universal set of questions for all participants and additional questions tailored for each type of participant: county agents, volunteer leaders and parents.

• Were you able to read and/or be read the consent to research form? By answering yes, you are agreeing to participate in this research study.

This interview guide is structured to create conversation, so before we begin, I want to let you know I will ask all the questions on the interview guide to follow interview protocol. If you feel you have already answered a question, you may let me know or use the opportunity to elaborate on the specific topic.

### I'm now going to ask you a series of open-ended questions:

- How do you currently receive information about horse facts?
- How do you currently receive information about 4-H club opportunities?
- How would you describe your experience with 4-H horse clubs?
- In your opinion, how do you believe your 4-H horse club impacts youth?
- In your opinion, how do you believe your 4-H horse club impacts the community?
- In your opinion, what characteristics make a 4-H horse club successful?
- In your opinion, what are the characteristics of a successful 4-H club of any type?
- What are some barriers you've experienced with your current 4-H horse club?
- What are some opportunities you see for your 4-H horse club to become more successful?
- What role do you provide in making your 4-H horse club successful?
- What role do you think your county agent should take in your horse club?

The following questions are specifically structured to discuss volunteer leaders.

- What are characteristics of successful volunteer leaders?
  - What kind of training to you think is necessary to be a successful leader?
- What do you believe volunteer leaders need to be more successful in their role?
- What value do volunteer leaders add to the 4-H horse club you're involved with?
  - What value do volunteer leaders add to the members?
- What do you perceive to be the greatest hurdle for volunteer leaders?
- What materials/resources would help you as a volunteer leader?

### Additional Questions (5) for Volunteer Leaders

- What motivates you to be involved with 4-H?
- How would you describe the motivation level of your youth club members?
- How would you describe your horse knowledge and skills?
  - a. Beginner can catch, lead, and tie
  - b. Intermediate can tack, load and worm
  - c. Advanced can administer vaccines, diagnose symptoms of illness or injury
- How would you describe your relationship with the 4-H county agent?

### Opportunity to make additional remarks.

Is there anything else you would like to add or elaborate on before we conclude the interview with a few demographic questions?

## Demographics Questions (4) All Participants

- How long have you been in your current position as a volunteer leader?
- How long have you been involved in 4-H?
- How long have you been involved in the equine industry?
- Age and Gender

Thank you for taking time out of your day to share your experiences and opinions with us. Your participation is greatly appreciated and has provided valuable insight into this topic. Thank you.

Article 2: Appendix G.

Parent Telephone Interview Script and Guide

### **Interview Script - Parents**

Hello	,

This is Fawn Kurtzo, I am calling to conduct your telephone interview for the equine 4-H club study.

Is this still a good time for you?

- If yes: great, let's get started!
- If no: reschedule.

Just to be clear I am in a private setting, and I am utilizing speaker phone and a hand held audio recorder to capture our interview today. If at any time you would like to restate or retract an answer that is completely acceptable.

Are you ready to get started?

Move to interview guide.

### **Interviewing Guide:**

The purpose of this study is to capture the essence of perceived needs, benefits, opportunities and challenges of the Arkansas 4-H equine clubs according to county agents, volunteer leaders and parents of active club members. Moreover, this study sought to guide the development of a survey instrument to identify the needs, benefits, opportunities and challenges of Arkansas equine 4-H clubs according to all 4-H county agents and volunteer leaders at a state-wide level. I will ask a series of questions including a universal set of questions for all participants and additional questions tailored for each type of participant: county agents, volunteer leaders and parents.

• Were you able to read and/or be read the consent to research form? By answering yes, you are agreeing to participate in this research study.

This interview guide is structured to create conversation, so before we begin, I want to let you know I will ask all the questions on the interview guide to follow interview protocol. If you feel you have already answered a question, you may let me know or use the opportunity to elaborate on the specific topic.

### I'm now going to ask you a series of open-ended questions:

- How do you currently receive information about horse facts?
- How do you currently receive information about 4-H club opportunities?
- How would you describe your experience with 4-H horse clubs?
- In your opinion, how do you believe your 4-H horse club impacts youth?
- In your opinion, how do you believe your 4-H horse club impacts the community?
- In your opinion, what characteristics make a 4-H horse club successful?
- Are these different than other types of 4-H clubs?
- What are some opportunities you see for your 4-H horse club to become more successful?
- What are some barriers you've experienced with your current 4-H horse club?
  - o How could the communication be more convenient?

The following questions are specifically structured to discuss volunteer leaders.

- What are characteristics of successful volunteer leaders?
- What do you believe volunteer leaders need to be more successful in their role?
  - What materials/resources/training would help the leaders?
- What value do volunteer leaders add to the 4-H horse club you're involved with?
  - What value do volunteer leaders add to the members?
- What do you perceive to be the greatest hurdle for volunteer leaders?

### Additional Questions (3) for Parents

- How would you describe your horse knowledge and skills?
  - a. Beginner can catch, lead, and tie
  - b. Intermediate can tack, load and worm
  - c. Advanced can administer vaccines, diagnose symptoms of illness or injury
- How would you describe your relationship with the 4-H horse club volunteer leaders?
- How would you describe your relationship with the 4-H county agent?
- In your lifestyle, where do you prioritize 4-H activities and events?

## Opportunity to make additional remarks.

Is there anything else you would like to add or elaborate on before we conclude the interview with a few demographic questions?

### Demographics Questions (4) All Participants

- How long have you been involved with horse 4-H clubs?
- How long have you been involved in the equine industry?
- Age and Gender

Thank you for taking time out of your day to share your experiences and opinions with us. Your participation is greatly appreciated and has provided valuable insight into this topic. Thank you.

Chapter 5

Article 3

### Arkansas Horse 4-H Program Stakeholders' Perceptions Generate Program Assessment

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*Dr. Leslie D. Edgar* is a professor at the University of Arkansas in the Department of Agricultural Education, Communications and Technology. She also serves as the Assistant Dean of Student Programs for Bumpers College.

*Dr. Donna L. Graham* is a professor at the University of Arkansas in the Department of Agricultural Education, Communications and Technology. Her research focus includes volunteer leadership and Extension.

*Dr. Mark Russell* is an assistant professor of equine sciences at the University of Arkansas. He has served as the state equine specialist since 2010

#### Abstract

Evaluation practices have been prescribed to improve programming design, execution, and support. The Implementation Issues Framework (IIF) was designed to increase the cognition of social factors presented by participants, program staff, organizational climate, and communities during program implementation. IIF guided a statewide assessment of impacts on facilitation of the Arkansas horse 4-H program. Club characteristics, program staff characteristics and program outcomes were described by Extension staff and volunteer leaders through mixed-mode surveys. Likert-scale item frequencies were analyzed through Statistical Package for Social Sciences, and open responses were hand coded to identify emergent themes. Impacts associated with club participants included equine interests, access to resources, parental support, and financial capacity. Impacts associated with program staff included internal relationships, horse-related competencies, horse-related interests, stakeholder support, and club membership levels. Survey participants also described clubs and program staff are impacted by the availability of community resources. Program outcomes were largely positive at the youth and community levels. Recommendations include reporting program outcomes to improve parental engagement and support, thereby improving youth recruitment and retention. Strategy meetings at the club and program staff levels are recommended to foster support and innovation. Recommendations for future research include exploring the impact of volunteer leader management practices. Keywords: 4-H; horse; implementation issues framework; program assessment

In the modern "accountability era" (Radhakrisha & Bowen, 2010, para. 11) Extension programs are challenged to improve program efficiency, defend funding, and remain adaptive to meet the needs of diverse stakeholder audiences (West, Drake, & Londo, 2009). West and colleagues (2009) described the livelihood of modern Extension programs hinges on the ability to maintain an innovative outlook on programming. Many agricultural educators have described the importance of evaluation to improve program facilitation (Rennekamp & Arnold, 2009; Duerden & Witt, 2012), development, outcomes (Roberts, Hard, & Brashears, 2016), and support (Forest, 1976).

Reviewing internal and external factors that influence the facilitation of a program through assessments, or formative evaluations, have been described to improve program outcomes (Duerden & Witt, 2012; Rennekamp & Arnold, 2009). Previous research emphasizes the importance of formative evaluation through regularly assessing the needs of programs, facilitators, and participants to maintain a quality program (Culp, Edwards & Jordan, 2015; Forstadt & Fortune, 2016; Nieto, Schaffner, & Henderson, 1997; Seevers and Stair, 2015). Moreover, Duerden and Witt (2012), stated inclusion of program implementation factors increased the validity of program outcome findings.

Meanwhile, reporting program outcomes, or impacts, through summative evaluations have been described to improve program support and accountability (Radhakrishna & Bowen, 2010; Rennekamp & Arnold, 2009). Summative evaluation reports have been prescribed to leverage financial (Merten, Williams, Carter, & Lehman, 2014) and personal investment among stakeholders (Arnold, Dolenc, & Rennekamp, 2009; Cleveland & Thompson, 2007; Hedrick, Homan, & Dick, 2009; Homan, Dick & Hendrick, 2007).

The Implementation Issues Framework (IIF) targets potential "on-the-ground" realities program facilitation may face as program models are implemented within the social influences of participants, program staff, organizational climate, and communities (Abell, Cummings, Duke, & Marshall, 2015, para. 24). In addition, the IIF presents the opportunity for short-term and long-term program outcomes to influence program implementation (Abell et al., 2015). As illustrated in Figure 1, Abell and colleagues (2015), describe the permeability of each sphere to affect other spheres and ultimately, program outcomes.

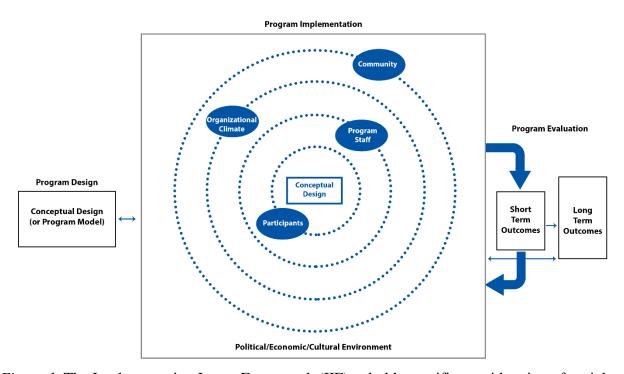


Figure 1. The Implementation Issues Framework (IIF) upholds specific consideration of social factors that impact program implementation practices, and consequently, program outcomes. Reprinted from "A framework for identifying implementation issues affecting extension human sciences programming" by E. Abell, R. Cummings, A. M. Duke, & J. W. Marshall, (2015), Journal of Extension, 53(5).

The IIF was developed to strengthen the cognition of social factors presented by multiple stakeholder audiences during program implementation (Abell et al., 2015). Program stakeholders

have been discussed with great importance in evaluation processes as program input resources (Diaz, Jayaratne, Bardon, & Hazel, 2014), sources of power (Wholey, Hatry, & Newcomer, 2010), and ultimately, a target audience of evaluation results (Connors, 2012). Culp, Edwards and Jordan (2015) utilized stakeholders' perspectives to steer program improvements and experienced increased stakeholder by in. Moreover, the volunteer audience of Extension programs present a unique need for formative and summative evaluations (Connors, 2012; Culp, 2013). Volunteers serve in many roles and act as the community outreach arm of programs (Graham, Arnold, & Jayaratne, 2016, Chapter 6; Vettern, Hall, & Schmidt, 2009). Feedback in the form of performance evaluations (Culp, 2013), and program impacts have been found to increase the longevity of volunteerism (Farris, McKinley, Ayres, Peters, & Brady, 2009; Washburn, Cornell, Traywick, Felix, & Phillips, 2015).

According to the Arkansas Extension equine specialist, stakeholders of the Arkansas horse 4-H program remain largely unidentified (M. Russell, personal communication, February 2, 2016). Moreover, identification of program facilitators and counties of youth with equine interests are incomplete (M. Russell, personal communication, February 2, 2016; N. Washburn, personal communication, March 8, 2016). As of 2016, the program is only advised by one formal evaluation of an innovative camp (M. Russell, personal communication, December 1, 2016).

Despite a six-year increase in state show participants, many members struggle with horsemanship and safety skills and dropout rates increase as members reached adolescence (M. Russell, personal communication, February 2, 2016).

Therefore, the program faces a limited capacity to secure program sustainability and stakeholder support (Radhakrishna & Bowen, 2010). Horse 4-H clubs aim to provide equal opportunities and replicate program outcomes throughout the state; however, limited insight

about program implementation threatens the actual outcomes (Duerden & Witt, 2012; Rennekamp & Arnold, 2009). Moreover, a limited awareness of volunteer leaders' needs and experiences restricts the program's capacity to effectively recruit and retain (Culp, 2013) the volunteer leaders it heavily relies on (M. Russell, personal communication, February 2, 2016). Finally, the lack of formal documentation of program outcomes restricts the ability to improve participant recruitment (Homan, Dick & Hedrick, 2007), parental support (Hedrick, Homan, & Dick, 2009), community support (Merten, Locke, Williams, Carter, & Lehman, 2014) and funding sources (West, Drake, & Londo, 2009).

The purpose of this study was to describe positive and negative impacts on the implementation of Arkansas' horse 4-H program. The following objectives guided the study:

- 1) Describe club characteristics.
- 2) Describe program staff characteristics.
- 3) Describe program outcomes.

### **Methods and Procedures**

Mixed-mode surveys were designed for the population of Extension staff and volunteer leaders associated with horse clubs throughout the state including a universal set of questions and audience-specific questions. This survey was developed based on an interview protocol that was administered in the summer of 2016 to a similar audience in Arkansas. Survey constructs and Likert-scale items were based on key phrases (Smith & Lincoln, 1984), and emergent themes of purposive interviews with county agents (n = 6), volunteer leaders (n = 4), and parents of active club members (n = 4) representing each district of Arkansas. A panel of five Extension experts and one communications expert established face and content validity of the instruments.

Survey participants were identified and recruited through a state-wide survey that functioned as a qualification questionnaire received by all staff chairs, county agents with 4-H appointments, and 4-H program assistants for all counties (n = 75). The electronic questionnaire (Qualtrics, Provo, UT) provided an opportunity to describe the level of equine interest among 4-H members in each respective county. According to available and selected descriptions, counties were categorized as "none" having no 4-H members participating in equine-related activities, as "independent" having 4-H members with horse projects or participating in horse-related activities without the presence of a club, as "community clubs" when multi-project clubs with an equine-specific components were identified, and as "horse clubs" for single-project clubs focusing on horse projects. Results are illustrated in Figure 2.

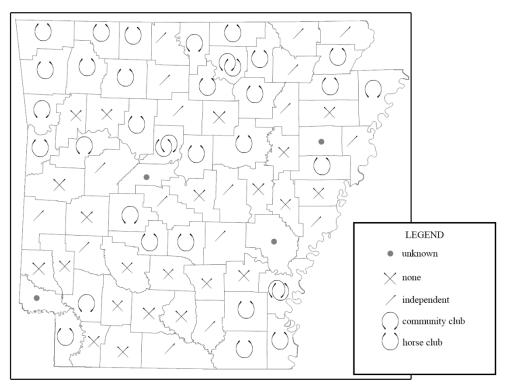


Figure 2. Reported levels of equine interest among 4-H members, according to Extension staff of each county in Arkansas.

The qualification questionnaire identified 65% of counties having youth with equine interest including the following: 26 counties with horse project clubs, 9 counties with a horse component in community clubs, 17 counties with independent 4-H members who participate in horse-related 4-H activities or upheld horse projects without horse clubs. Three counties had both single-project horse clubs and communities clubs. No 4-H members were reported to participate in horse-related 4-H activities in 22 counties. After three attempts to establish contact with Extension staff, twice through email and once by phone, four counties (5%) remained unidentified.

Secondly, the questionnaire functioned as a recruitment tool for the survey detailed in this article. Chain-referral by Extension staff identified volunteer leaders affiliated with horse clubs. Seventy-three percent of identified volunteer leaders were successfully recruited for the survey (n = 33) in addition to 30 Extension staff members. The online survey format was preferred by all county agents (n = 30) and 79% of volunteer leaders (n = 25). Mailed surveys were preferred by 21% of volunteer leaders (n = 7), and one leader requested both formats due to potential computer issues.

Requests to complete the survey followed Dillman's 5-step approach (Dillman, Smyth, & Christian, 2009). Overall, the data collection process spanned six weeks of early spring 2017. Electronic surveys (n = 55) were provided through Qualtrics  $^{TM}$ , with mobile and desktop compatibility. Mailed surveys (n = 7) were sent directly to participants in large clasp folders with stamped and addressed return envelopes. Both electronic and mailed surveys maintained conformity through unified mode presentation (Dillman et al., 2009).

Participants were coded alphabetically and numerical to retain autonomy and preserve audience type. County agents were noted with "A", program assistants with "P", volunteer

leaders with "V", and numbered according to chronological order of returned responses within each audience. Statistical Package for the Social Sciences© (SPSS) version 23.0 was utilized to calculate frequencies, means, standard deviations, and reliability tests. Cronbach's alpha, a measure of reliability, for the Extension staff survey and the volunteer leader survey were .96 and .77, respectively. Gutterman's split-half coefficients (Krathwohl, 2009) were used to further analyze survey constructs related to the following: club challenges (.82), club needs (.77), club assets (.82), Extension staff support (.88), horse-related competencies of program staff (.94), horse-related interests of program staff (.95), volunteer leader challenges (.72), volunteer leader needs (.78), Extension staff challenges (.76), youth outcomes (.76), and community outcomes (.54), ( $\alpha$  =.05). Community outcomes were represented three items; therefore, resulted in a low split-half coefficient.

Open response questions were hand coded to produce emergent themes with initial open coding and axial coded to develop additional sub-themes (Creswell, 2014). Inter-coder agreement was established between two researchers (Creswell, 2014). Codes and keywords were kept in context and descriptive summaries were maintained throughout node creation. (Creswell, 2014). Themes are identified with an underline.

#### Results

Participants provided an 88.5% response rate (n = 54) and represented all districts of Arkansas including, Ozark (40.4%), Ouachita (29.8%), and Delta (29.8%). Out of 50 participants, 46.3% were female volunteer leaders, 35.2% were female Extension staff, 11.1% were male Extension staff and none identified as male volunteer leaders. Four participants did not mark their gender (7.4%). Participants represented 83% of identified counties with horse

clubs in Arkansas (n = 29). Additional demographic information described in the program staff characteristics section of results.

#### **Club Characteristics**

Enrolled club members ranged from 2-400 with a mean of 39.15 (SD = 35.00). Active club members ranged from 0-350 with a mean of 33.64 (SD = 70.32), and inactive club members were reported by 69.8% of participants (n = 37). Extension staff and volunteer leaders who reported inactive club members were provided the opportunity to describe why they perceived members to be inactive through open response format. Survey respondents most commonly felt youth become inactive due to <u>losing interest/competing for time with other extracurricular activities</u> (n = 15).

Survey participants most frequently agreed or strongly agreed with the presence of horse club challenges in the following: youth are highly involved with other activities which restricts participation in club activities (n = 31), traveling to shows, clinics or camps is too expensive (n = 23), and parents are not willing to engage at the level needed (n = 22). Additionally, as shown in Table 1, participants most frequently disagreed or strongly disagreed with horse club challenges in the following areas: specific horse events create a sense of division among club members (n = 24), issues with insurance/liability at events (n = 23), and specific horse events create a sense of division of our club from other horse 4-H clubs (n = 24).

Perceived Challenges of Horse Clubs According to Affiliated Extension Staff and Volunteer Leaders

Table 1

Item	n	SD	D	SLD	SLA	A	SA
Youth are highly involved with other activities which restricts participation in club activities	50	2	4	1	12	18	13
Parents are not willing to engage at the level needed	49	3	7	7	10	10	12
Geographic isolation which restricts the ability to participate in 4-H functions	49	4	10	9	10	7	9
Traveling to shows, clinics or camps is too expensive	50	1	3	6	17	15	8
Parents do not have time to engage at the level needed	49	3	5	4	17	13	7
Purchasing and maintaining a horse is too expensive	49	1	4	6	18	14	6
Riding opportunities are often restricted by weather	49	2	6	13	13	9	6
Participating in 4-H shows, clinics or camps is too expensive	48	1	8	7	15	12	5
Proper equipment for 4-H shows, clinics or camps is too expensive	49	2	7	7	19	10	4
Local opportunities such as shows, camps or clinics are too expensive to provide	48	1	11	7	13	12	4
Commitment of owning a horse is too burdensome	49	5	5	2	20	14	3
Making adjustments based on the loud voices of a few individuals rather than collective interests	47	5	10	7	11	11	3
Specific horse events create a sense of division among club members	49	7	16	11	10	2	3
Internal leadership positions become stagnant and restrict positive change	49	7	14	6	9	12	1
Issues with insurance/liability at events	48	7	16	10	12	2	1
Restriction of positive change due to external political pressure	45	7	14	18	4	1	1
Specific horse events create a sense of division of our club from other horse 4-H clubs	48	10	14	12	7	4	1

*Note.* Likert scale data reported in frequencies. Scale used: SD = strongly disagree; D = disagree; SLD = slightly disagree; SLA = slightly agree, A = agree; SA = strongly agree.

Additionally, survey participants were provided an opportunity to describe challenges or conflict associated with their horse club through open response format. Provided club challenges included: insufficient support from stakeholders (n = 7), travel/safety/convenience venue difficulties (n = 7), limited investment among youth (n = 6), time constraints (n = 6), members without horses (n = 4), lack of funding (n = 3), and expense (n = 3). The most frequent conflict reported included youths' sole focus on speed or rodeo events (n = 3) which resulted in disbandment of a club (V16), lack of interest in basic equitation (V23), or only attending meetings that include speed event practice (V24).

Survey participants most frequently agreed or strongly agreed with horse club needs of the following: local educational opportunities (e.g. guest speakers, clinics, seminars, etc.) (n = 34), youth enrollment (n = 30), and access to a suitable, convenient riding facility (n = 28). Extension staff and volunteer leaders most frequently disagreed or strongly disagreed with existence of needs in the following: access to proper equipment (e.g. tack, training aids, clothes, etc.) (n = 13), safe horses (n = 11), educational resources (e.g. databases) (n = 11), and educational materials (e.g. worksheets) (n = 11). Additional responses are noted in Table 2. Participants were provided the opportunity to write in answers missing to club needs and one participant slightly agreed to financial support provided by the community (V25).

Perceived Needs of Horse Clubs According to Affiliated Extension Staff and Volunteer Leaders

Table 2

Item	n	SD	D	SLD	SLA	A	SA
Youth enrollment	46	1	6	6	3	15	15
Local educational opportunities (e.g. guest	46	1	3	5	3	22	12
speakers, clinics, seminars, etc.)	4.77	2	_	_	7	1.5	10
Parental support	47	3	5	5	7	15	12
Access to a suitable, convenient riding facility	47	2	8	2	7	18	10
Volunteer leaders	47	4	5	6	8	14	10
Safe horses	47	6	5	5	8	14	9
Local competitions	47	2	5	4	10	18	8
Community support	46	3	5	6	13	13	6
Educational resources (e.g. databases)	46	4	7	7	11	14	3
Access to proper equipment (e.g. tack, training	47	5	8	5	9	18	2
aids, clothes, etc.)							
Educational materials (e.g. worksheets)	46	4	7	6	11	16	2
Competitive horses	46	3	6	4	14	18	1

*Note.* Likert scale data reported in frequencies. Scale used: SD = strongly disagree; D = disagree; SLD = slightly disagree; SLA = slightly agree, A = agree; SA = strongly agree.

Survey participants most frequently agreed or strongly agreed to the following horse club assets: youth are interested in horses (n = 40), meeting content is educational (n = 32), and meeting content is fun (n = 32). Table 3 also notes that participants most frequently disagreed or strongly disagreed with the following club assets: multiple fundraising opportunities (n = 14), parents are highly involved (n = 11), and local competitive opportunities (n = 11).

Perceived Assets of Horse Clubs According to Affiliated Extension Staff and Volunteer Leaders

Item	n	SD	D	SLD	SLA	A	SA
Youth are interested in horses	47	0	0	1	6	25	15
Hold regular meetings	47	2	1	5	7	19	13
Wealth of horse knowledge exists in the community	47	1	2	6	11	17	10
Volunteer leaders work cohesively	45	2	4	4	9	18	8
Volunteer leaders are focused	47	2	5	7	7	19	7
Local competitive opportunities	46	6	5	9	7	14	5
Local riding facilities/opportunities	46	4	4	5	11	17	5
Meeting content is educational	47	0	0	4	9	29	5
Meeting content is fun	45	0	0	3	8	29	5
A diverse interest in disciplines and competitive activities	46	2	7	2	12	19	4
Successful new member recruitment	46	5	3	11	14	9	4
Parents are highly involved	46	6	5	6	15	10	4
Youth are highly motivated	46	1	2	7	13	19	4
Strong and consistent community outreach	45	6	3	13	13	7	3
Successful organization and planning of club activities	45	2	2	8	13	17	3
Community members are willing to volunteer and educate club members	47	3	6	4	13	19	2
Fundraising efforts are successful	46	2	5	8	14	15	2
Multiple fundraising opportunities	45	2	12	11	12	7	1

*Note.* Likert scale data reported in frequencies. Scale used: SD = strongly disagree; D = disagree; SLD = slightly disagree; SLA = slightly agree, A = agree; SA = strongly agree.

# **Program Staff Characteristics**

Table 3

The largest percent of survey participants were between ages 31 and 40 years (38.3%), followed by 41-50 (27.6%), 30 or less (12.8%), 51-60 (12.7%), and over 60 years (8.5%). Extension staff members' 4-H appointments ranged from zero to 100% (M = 55.2, SD = 34.60). The largest percent of survey participants identified between one and five years of service in their position (45.8%), followed by greater than 10 years (29.2%), less than one year (14.6%),

and six to 10 years of service (10.4%). The largest percentage of survey participants identified involvement with 4-H since childhood (39.6%), followed by six to 10 years (20.8%), one to five years (18.8%), 11-20 years (12.5%), and the smallest percentage reporting less than one year experience (8.3%). The largest percent of survey participants identified experience in the horse industry "since childhood" (66.7%), followed by "do not consider myself involved" (16.7%), less than five years (6.3%), 11-20 years (6.3%), and five to 10 years (4.2%).

Program staff commonly attributed their motivation to remain involved with horse clubs to the positive impact on youth (n = 33); including <u>life skills</u> (n = 7), <u>opportunities</u> (n = 5), and <u>growth</u> (n = 4). Five Extension staff related their continued involvement with horse clubs due to <u>job duties</u>. Volunteer leaders also referenced <u>passion for horses</u> (n = 3) and "love" for the 4-H program (V2) and. One volunteer leader enjoyed the opportunity to embrace being a lifelong learner (V19).

Survey participants presented a range of satisfaction levels with their horse club from very satisfied (n = 5), satisfied (n = 23), somewhat satisfied (n = 15), somewhat unsatisfied (n = 3), unsatisfied (n = 3), and very unsatisfied (n = 2). An open response opportunity directly followed, and asked participants to justify why they felt the way they reported. The most frequent positive themes included supportive stakeholders (n = 8) and good volunteer leaders (n = 5). The most frequent negative themes included the following: poor membership/participation (n = 12), lack of materials/resources (n = 5), and volunteer leader incompetence (n = 3).

Table 4 notes volunteer leaders of horse clubs most frequently agreed or strongly agreed with support provided by Extension staff with 4-H appointments in the following areas: provides registration assistance (n = 22), is a source of information for 4-H structure and methods (n = 20), and participates in club competitions (e.g. ORAMAs, shows, etc.) (n = 18). Volunteer leaders

most frequently disagreed or strongly disagreed with support provided by Extension staff with 4-H appointments in the following areas: is involved with club activities (n = 6), secures additional funding for my club (n = 6), and is a source of information for equine knowledge (n = 6).

Self-Reported Areas of Support Volunteer Leaders of Horse Clubs Receive from Extension Staff with 4-H Appointments

Table 4

Item	n	SD	D	SLD	SLA	A	SA
Provides registration assistance	24	0	0	0	2	11	11
Is a source of information for 4-H structure and methods	24	0	0	0	4	10	10
Is a source of information for club opportunities	24	1	1	3	3	6	10
Participates in club competitions (e.g. ORAMAs, shows, etc.)	24	0	3	0	3	9	9
Assisting with meetings	24	1	4	2	1	8	8
Is involved with club activities	24	1	5	2	1	7	8
Is a source of information for local resources (e.g. guest speakers, specialized programs, etc.)	24	2	3	3	2	7	7
Secures additional funding for my club	24	2	4	3	3	6	6
Is a source of information for equine knowledge	24	3	3	2	2	8	6
Stays out of my way	24	0	3	0	5	11	5

*Note.* Likert scale data reported in frequencies. Scale used: SD = strongly disagree; D = disagree; SLD = slightly disagree; SLA = slightly agree, A = agree; SA = strongly agree.

Extension staff and volunteer leaders of horse clubs most frequently stated competent or very competent horse related skills in the following: *public speaking* (n = 35), *speed riding discipline* (n = 26), and *show operations* (n = 25). Survey participants most frequently reported incompetent or very incompetent horse-related skills in the *English riding discipline* (n = 23) and *leatherwork/saddlery* (n = 18). Additional responses are noted in Table 5. Survey participants

were provided the opportunity to write in answers missing to their horse related competencies. Answers added were identified as very competent and included the following: "dressage" (V4), "love of horses" (V20), "show grooming" (V4), "safety" (V20), "riding lessons" (V4), "horsemanship basics" (V20), and "Arabians and shows" (V4).

Table 5

Self-Reported Equine Knowledge and Competencies of Horse Club Extension Staff and Volunteer Leaders

Item	n	VI	I	SI	SC	С	VC
Public speaking	49	2	1	2	9	23	12
Medical/veterinary	49	9	4	5	12	10	9
Equine nutrition	49	4	5	3	13	16	8
Horsemanship principles/skills	49	8	5	3	10	15	8
Western riding discipline	49	8	4	4	10	15	8
Equine anatomy	48	4	5	5	14	13	7
Speed riding discipline	48	8	5	3	6	19	7
Show operations	49	4	5	4	11	18	7
Training techniques	49	8	4	5	11	14	7
English riding discipline	48	18	5	11	3	5	6
Demonstration competitions	39	6	2	5	10	11	5
Show guidelines/regulations	48	5	3	5	13	17	5
Horse judging	49	6	8	4	16	11	4
Ranch riding discipline	48	11	4	7	7	15	4
Leatherwork/saddlery	48	10	8	6	10	11	3

*Note.* Likert scale data reported in frequencies. Scale used: VI = very incompetent; I = incompetent; SI = somewhat incompetent; SC = somewhat competent; C = competent; VC = very competent.

As shown in Table 6, Extension staff and volunteer leaders of horse clubs most frequently always or often seek information on horse topics of the following: medical/veterinary (n = 28),  $horsemanship\ principles/skills\ (n = 26)$ , and  $show\ guidelines\ (n = 25)$ . Survey

participants most frequently reported never or rarely seeking information on horse topics of the following: English riding discipline (n = 27), leatherwork/saddlery (n = 14), and ranch riding discipline (n = 12). Survey participants were provided the opportunity to write in answers missing to their horse related interests. One volunteer leader reported often seeking "driving" information (V28).

Table 6

Self-Reported Equine Interest Areas of Horse Club Extension Staff and Volunteer Leaders

Item	n	N	R	S	О	A
Western riding discipline	46	4	6	11	14	11
Medical/veterinary	45	3	3	11	18	10
Horsemanship principles/skills	46	3	5	12	16	10
Ranch riding discipline	44	4	8	11	11	10
Speed riding discipline	43	5	5	11	12	10
Show operations	47	5	6	16	12	8
Equine nutrition	45	3	3	15	16	8
Show guidelines	46	4	3	14	18	7
Equine anatomy	45	4	5	18	13	5
Horse judging	45	4	3	15	18	5
Horse training techniques	45	5	5	13	18	4
Leatherwork/saddlery	45	7	7	21	7	3
English riding discipline	44	16	11	8	6	3

*Note.* Likert scale data reported in frequencies. Scale used: N = never; R = rarely; S = sometimes; O = often, A = always.

Volunteer leaders of horse clubs most frequently agreed or strongly agreed with challenges of the following: *lacking time to achieve all I desire with the club* (n = 10), *members are too difficult to motivate* (n = 7), and *parents are not helpful* (n = 7). Volunteer leaders most frequently disagreed or strongly disagreed with challenges in the following areas: *other volunteer* 

leaders are not helpful (n = 20), my county agent is not helpful (n = 15), and poor communication with parents makes it difficult to schedule meetings or activities (n = 14). Additional identified volunteer leader challenges are noted in Table 7.

Table 7
Self-Reported Challenges of Horse Club Volunteer Leaders

Item	n	SD	D	SLD	SLA	A	SA
Spending too much time reminding parents of upcoming meetings or activities	25	3	7	1	8	2	4
Poor communication with parents makes it difficult to schedule meetings or activities	25	5	9	1	4	3	3
Members are too difficult to motivate	25	5	4	5	4	4	3
Learning about club opportunities too late to properly prepare	25	2	5	7	5	4	2
Lacking the time to achieve all I desire with the club	25	2	3	4	6	8	2
My county agent is not helpful	25	8	7	4	3	1	2
Parents are not helpful	24	8	0	7	2	5	2
Struggling to complete mandatory annual volunteer leader training	25	4	8	3	5	4	1
Developing educational materials for each club meeting is difficult	25	3	3	7	6	5	1
Other volunteer leaders are not helpful	25	13	7	1	1	2	1

*Note.* Likert scale data reported in frequencies. Scale used: SD = strongly disagree; D = disagree; SLD = slightly disagree; SLA = slightly agree, A = agree; SA = strongly agree.

As noted in Table 8, Extension staff and volunteer leaders of horse clubs most frequently agreed or strongly agreed with volunteer leaders' needs in the following areas: *more information* about non-riding activities or competitive opportunities (n = 35), horse 4-H specific monthly update (e.g. clinics, camps, etc.) (n = 35), and a database of local resources (e.g. facilities, equine professionals, medical assistance, farriers, competitive opportunities, etc.) (n = 33).

Survey participants most frequently disagreed or strongly disagreed with volunteer leader needs in the following areas: assistance with annual registration of club members (n = 13), 4-H structure training (e.g. methods of conducting meetings) (n = 11), and educational resources about competition processes, requirements and regulations (n = 9).

Table 8

Perceived Needs of Horse Club Volunteer Leaders According to Affiliated Extension Staff and Volunteer Leaders

Item	n	SD	D	SLD	SLA	A	SA
More information about non-riding activities or competitive opportunities	47	2	1	2	7	19	16
Equine 4-H specific monthly update (e.g. clinics, camps, etc.)	48	2	2	2	7	24	11
Fundraising assistance/support	48	0	4	2	13	18	11
Teaching aids (e.g. meeting lesson plans, content, games, etc.)	47	2	3	2	12	18	10
Youth recruitment aids	45	1	3	3	13	16	9
A database of local resources (e.g. facilities, equine professionals, medical assistance, farriers, competitive opportunities, etc.)	47	1	1	3	9	25	8
Instructor/training supplies (e.g. cones, lunge lines, helmets, etc.)	48	2	3	6	11	19	7
More flexible annual training options	46	1	2	8	14	16	6
4-H structure training (e.g. methods of conducting meetings)	48	2	9	5	10	18	4
Assistance with annual registration of club members	48	3	10	11	5	15	4
Educational resources about competition processes, requirements or regulations	48	3	6	5	10	20	4

*Note.* Likert scale data reported in frequencies. Scale used: SD = strongly disagree; D = disagree; SLD = slightly disagree; SLA = slightly agree, A = agree; SA = strongly agree.

Extension staff of horse clubs most frequently agreed or strongly agreed with challenges of: lacking time due to multiple job duties (n = 15), shortage of finances (n = 12), and inadequate training (n = 8). Extension staff most frequently disagreed or strongly disagreed with existence of challenges in the following areas: I feel uncomfortable working with people in the horse industry (n = 20), under developed personal skills (n = 19), and I feel volunteer leaders do not seek to develop a relationship with me (n = 18). Additional responses are noted in Table 9. Extension staff were provided the opportunity to write in answers missing to their challenges. Answers included the following: "...only support of the statewide horse program is based in central/western Arkansas..." (A6) and "...most all training is in a certain area and is a long way off for most of us" (P3).

Self-Reported Challenges of Horse Club Extension Staff

Table 9

Item	n	SD	D	SLD	SLA	Α	SA
Lack of time due to multiple job duties	25	3	0	3	4	9	6
Shortage of finances	25	4	3	3	3	8	4
Horse knowledge is not my area of expertise	24	8	5	2	3	4	2
Inadequate training	24	6	7	2	1	6	2
Under-developed personal skills	23	6	13	0	1	1	2
4-H is not my area of expertise	24	13	8	1	1	0	1
Shortage of educational materials	24	5	6	4	3	5	1
I feel administration doesn't provide proper	23	4	11	2	3	3	0
support	~~	_					
I feel uncomfortable working with people in the horse industry	25	6	14	1	3	1	0
I feel volunteer leaders do not seek to develop a relationship with me	24	8	10	4	1	1	0

*Note*. Likert scale data reported in frequencies. Scale used: SD = strongly disagree; D = disagree; SLD = slightly disagree; SLA = slightly agree, A = agree; SA = strongly agree.

# **Program Outcomes**

Extension staff and volunteer leaders of horse clubs most frequently agreed or strongly agreed to the following youth benefits: *character growth* (n = 52), *increased confidence* (n = 51), and *setting goals* (n = 50). Participants most frequently disagreed or strongly disagreed with the following youth benefits: exposure to *equine opportunities and professionals* (n = 3), *competition* (n = 3), and *community service/volunteering* (n = 2). Additional responses are noted in Table 10. Participants were provided the opportunity to write in answers missing on the youth benefits items of participating in horse clubs. Answers added were noted as agreed or strongly agreed and included the following: "reality of livestock ownership" (A3), "reality of cost of livestock" (A3), "leadership skills" (V4), developing a conscience of safety (V12), and "responsibility" (V26).

Table 10

Perceived Benefits Horse Club Members Receive According to Affiliated Extension Staff and Volunteer Leaders

Item	n	SD	D	SLD	SLA	A	SA
A place to belong	51	0	1	0	1	23	26
Gaining equine knowledge	51	0	0	2	3	21	25
Increased confidence	52	0	0	0	1	29	22
Character growth	52	0	0	0	0	34	18
Community service/volunteering	52	0	2	1	7	25	17
Improved teamwork	52	0	1	1	7	26	17
Accepting differences	52	0	0	0	5	31	16
Equine opportunities and professionals	51	2	1	5	7	20	16
Competition	50	2	1	2	8	22	15
Increased concern for others	51	0	1	0	7	29	14
Setting goals	52	0	0	1	1	36	14
Improved problem solving	52	0	0	1	5	33	13

*Note.* Likert scale data reported in frequencies. Scale used: SD = strongly disagree; D = disagree; SLD = slightly disagree; SLA = slightly agree, A = agree; SA = strongly agree.

Extension staff and volunteer leaders of horse clubs most frequently agreed or strongly agreed communities receive *educational opportunities* (n = 44 of 51) from horse clubs, *a sense of pride* (n = 38 of 50), and *community service/volunteering* (n = 36 of 50). A few participants disagreed or strongly disagreed with community's receipt of the following benefits: *a sense of pride* (n = 3), *community service/volunteering* (n = 3), and *educational opportunities* (n = 1).

# **Conclusions and Implications**

## **Impacts Associated with Club Participants**

Extension staff and volunteer leaders of horse clubs in Arkansas described a variety of factors associated with club participants through club challenges, club needs, and club assets.

Rates of club membership range largely throughout the state from as few as two members to as many as 400, and some clubs had zero active members while others had over 300. Over half the clubs (69.8%) reported inactive members, primarily due to losing interest or high involvement with other extracurricular activities. Therefore, over half the clubs are not adequately meeting the needs of club participants; moreover, 65% of survey participants reported the need for more club members. Club participants' experiences are commonly limited by over commitment in extracurricular activities, unengaged parents, financial constraints, and the lack of owning a horse.

Additionally, a few clubs reported youth who are unwilling to respect others' riding interests as a source of conflict or unsupportive atmospheres. On the other hand, Extension staff and volunteer leaders commonly reported youth have adequate access to proper tack, training aides, and safe

horses. Moreover, 85% of survey participants agreed or strongly agreed youth are interested in horses.

### **Impacts Associated with Program Staff**

In addition to describing factors associated with club members, survey participants self-reported challenges, needs, levels of support, horse-related interests, and horse-related competencies. Diversity exists among program staffs' age, years of experience in the position, and years of experience in the horse industry. Program staff commonly reported involvement with 4-H and the horse industry since childhood, 39.6% and 66.7%, respectively. Whereas some participants did not consider themselves involved with the horse industry (16.7%). Diversity was also identified among Extension staffs' 4-H appointments, which ranged from zero to 100%. Levels of stakeholder support, volunteer leader competence, and club membership/participation affected program staffs' experiences.

The level of club investment among program staff is most commonly affected by time constraints (n = 25 out of 50). Program staff also reported volunteer leaders need a wide variety of information, supplies, funding, and educational resources to be effective. Nearly one half of Extension staff (48%) reported financial limitations. On the other hand, most Extension staff are experts in 4-H (87.5%), are comfortable working with people in the equine industry (80%), and have healthy relationships with volunteer leaders (75%). Volunteers are commonly supported by each other (80%) and Extension staff (60%). Volunteer leaders described Extension staff as providing diverse areas and levels of administrative and informational support during program facilitation. Few volunteers (25%) reported their Extension staff do not provide support with club activities or funding. At the organizational level, program staff commonly reported those serving

longer periods of time in leadership positions are willing to address the current needs of the program. However, two survey participants did not feel supported by state level staff.

Program staff reported a wide breadth of horse-related competencies with the greatest strengths in public speaking, the speed riding discipline, and show operations. On the other hand, less than half of participants reported competence in the English riding discipline (23%) and leatherwork/saddlery (29%). Program staff expressed diverse interests in horse-related information; however, very few often or always seek English riding discipline information (20%). Therefore, most program staff are willing to seek information to gain competency in many horse-related areas with the exception of the English riding discipline.

# **Impacts Associated with Communities**

Negative impacts such as expense and travel are often associated with competitions, camps, training, and experiences only available beyond the local community. Nearly one-half of participants (48%) did not find issues with liability restricting the ability to host events.

Therefore, the availability of community resources such as safe, convenient riding facilities impact clubs' ability to engage and educate participants. Most communities have a wealth of horse knowledge (57%) and community members are often willing to volunteer and educate participants (45%). The majority of program staff (70%) agreed awareness of local resources (e.g. facilities, experts, etc.) impacts the success of volunteer leaders. Some clubs do not have multiple fundraising opportunities in their community (31%).

### **Impacts Associated with Program Outcomes**

All clubs provided youth with positive program outcomes; however, some do not provide youth with equine opportunities and exposure to professionals. Positive youth program outcomes often provide a source of motivation for program staff to continue involvement with horse clubs.

Most clubs provide communities with positive impacts; however, participants noted few communities do not develop a sense of pride (6%) or youth volunteerism (6%) from their horse club.

# **Limitations to the Study**

Limitations to the study included methods of identifying counties with horse clubs, methods of identifying and recruiting survey participants, and non-responses from some counties. Researchers relied on Extension staff with 4-H appointments to describe the levels of horse activity among youth in their county for statewide survey recruitment. Some county 4-H staff members were out of the office conducting field work or completing training sessions; therefore, the level of participation in horse 4-H projects, clubs, or events was not attainable for five percent of counties (n = 4) and those counties were not provided the opportunity to participate in the statewide survey.

At the time of this study, no database existed to identify horse-related 4-H clubs, Extension staff, or volunteer leaders associated with clubs. Therefore, chain referral systems were used to identify participants and bias may have occurred as Extension staff provided contact information for volunteer leaders. It is unknown whether all volunteer leaders were provided the opportunity to participate in the survey.

All counties (n = 75) were provided a short qualification questionnaire to identify levels of horse 4-H interest in their county. The qualification questionnaire also provided counties with horse-related 4-H clubs the opportunity to accept/deny participation in an in-depth statewide survey, and provide/deny contact information for affiliated volunteer leaders. Recruited Extension staff and volunteer leaders were provided a pre-notice, survey, thank you card, replacement survey, and a phone call as the final attempt to request survey completion four

weeks after survey disbursal. During final attempt phone calls, several nonresponse Extension staff members felt they had already completed the survey. Upon further discussion, one staff member explained that he thought the pre-notice, thank you card, and replacement survey were all in regard to the first survey, the qualification questionnaire. One staff member thought the survey was only designed for volunteer leaders. Some confusion did exist among recruited Extension staff, which may have contributed to the 17% non-response rate among recruited Extension staff participants (n = 30). In addition, five analyzed survey responses were incomplete, potentially due to technology issues in electronic formats or survey length.

#### Recommendations

Recommendations for the Arkansas horse 4-H program include placing specific importance on youth recruitment and retention efforts. Previous research recommends building stronger social bonds with new and seasoned 4-H members to improve retention (Hamilton et al., 2014). According to Hamilton and colleagues (2012), the Arkansas horse 4-H program can decrease new member dropout by incorporating a mentorship system pairing new members and families with experienced members and families. The study also recommended providing opportunities for leadership, participation in events, and helping members outline annual 4-H goals that match their personal interests, to improve retention of seasoned members (Hamilton et al., 2014).

Encouraging parental engagement, involvement, or support of club members may also improve club member investment and retention (Scott et al., 1990). Measuring and reporting youth outcomes is a reoccurring source of motivation for parents (Hedrick et al., 2009; McKee et al., 2002). In Ohio, 4-H camps improved parental support and youth enrollment by reporting actual camp outcomes to prove the "meaningful investment" the experience provided youth

(Hedrick et al., 2009, para. 18). Employing this principle at the county level in marketing tactics and member recruitment and retention efforts may result in greater investment among a variety of stakeholders (Hedrick et al., 2009). Forest (1976) encouraged program staff to remember the "natural" importance of informal evaluation practices (p. 28). For clubs this could mean reporting activities, awards, and members' personal growth to highlight the positive impact of horse clubs to local stakeholders. Therefore, clubs should be encouraged to conduct annual strategy meetings to set and measure goals at the group and individual level.

In addition, conducting strategy meetings at a bi-quarterly or annual basis may help clubs set fundraising goals, identify opportunities to make a presence at community events, and develop a database of local resources. Although the desire for a database of local resources was expressed as a need of volunteer leaders, both leaders and Extension staff most frequently reported time constraints as their greatest challenge. Therefore, hosting a strategy meeting including club members, parents, leaders, and the associated county staff may provide the opportunity to brainstorm local opportunities of the following areas: riding areas, horse owners that might share a project horse, potential guest speakers, and other solutions to club-specific needs. Committees could be assigned and action plans created to delegate duties to willing club members, parents, or volunteers beyond club leaders and Extension staff.

Program staffs' experience in their positions ranged from one to five years to greater than 10 years. This difference implies the opportunity to develop mentorships to better support those new to the position and foster innovative program strategies is important (Forstadt & Fortune, 2016). A recent study among Extension staff in Maine recommended cultivating social connections at the individual, program, and community levels to overcome the isolation of

specialized program staff and improve personal and organizational sustainability in Extension programs (Forstadt & Fortune, 2016).

Few program staff reported levels of competence or interest in the English riding discipline. Youth may not have learning opportunities in these content areas at their local level; therefore, guest speakers and camp and clinic opportunities may provide the greatest access to this information. Seevers and Stair (2015) found many positive aspects of incorporating community partnerships to improve programs. Developing and sharing a statewide list of active equine organizations can connect local enthusiasts with similar interests to share information, opportunities, and resources. Similarly, encouraging outreach, cooperation, and sharing of resources between clubs of neighboring counties may increase the number of local educational and competitive opportunities for youth.

Recommendations for future research include increasing the accuracy of participant identification by documenting club interests and associated stakeholders on an annual basis. The use of Dillman's (2009) 5-step approach to request survey completion effectively resulted in an 87% response rate and is recommended for future surveys. Survey instruments were developed from stakeholders' responses in purposive interviews and did not adequately cover constructs associated with volunteer leader management as detailed in models such as ISOTURE, L-O-O-P, G.E.M.S., etc. (Seevers & Graham, 2012). Researchers recommend incorporating elements of volunteer leader management models to provide further insight. Findings of this study are limited to descriptive methods. Therefore, additional efforts to identify relationships among variables will highlight areas of greatest positive and negative impact among audience demographics, geographic locations, and construct items. Full instruments for this study are available from the state equine specialist, Mark Russell. Researchers identified many factors associated with

program implementation through the social lens of the IIF (Abell et al., 2015). As an increasing number of Extension programs are challenged to provide accountability for their programs and meet the diverse needs of stakeholders, researchers encourage using a holistic framework such as the IIF to tailor research objectives to current needs and develop multi-dimensional findings.

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**Article 3 Appendices** 

Article 3: Appendix A.

IRB Approval



Office of Research Compliance Institutional Review Board

October 26, 2016

MEMORANDUM	
TO:	Fawn Kurtzo Leslie Edgar Mark Russell Donna Graham
FROM:	Ro Windwalker IRB Coordinator
RE:	PROJECT MODIFICATION
IRB Protocol #:	16-05-754
Protocol Title:	Knowledge, Perceptions and Attitudes of the Arkansas Equine 4-H Program
Review Type:	☐ EXEMPT ⊠ EXPEDITED ☐ FULL IRB
Approved Project Period:	Start Date: 10/24/2016 Expiration Date: 05/30/2017
Your request to modify the	referenced protocol has been approved by the IRB. This protocol is

Your request to modify the referenced protocol has been approved by the IRB. This protocol is currently approved for 240 total participants. If you wish to make any further modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

Please note that this approval does not extend the Approved Project Period. Should you wish to extend your project beyond the current expiration date, you must submit a request for continuation using the UAF IRB form "Continuing Review for IRB Approved Projects." The request should be sent to the IRB Coordinator, 109 MLKG Building.

For protocols requiring FULL IRB review, please submit your request at least one month prior to the current expiration date. (High-risk protocols may require even more time for approval.) For protocols requiring an EXPEDITED or EXEMPT review, submit your request at least two weeks prior to the current expiration date. Failure to obtain approval for a continuation *on or prior to* the currently approved expiration date will result in termination of the protocol and you will be required to submit a new protocol to the IRB before continuing the project. Data collected past the protocol expiration date may need to be eliminated from the dataset should you wish to publish. Only data collected under a currently approved protocol can be certified by the IRB for any purpose.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.

109 MLKG • 1 University of Arkansas • Fayetteville, AR 72701-1201 • (479) 575-2208 • Fax (479) 575-6527 • Email irb@uark.edu

The University of Arkansas is an equal opportunity/affirmative action institution.

Article 3: Appendix B.

Qualification Questionnaire Introduction

Dear \${m://FirstName},

I am Fawn Kurtzo, a second year graduate student at the University of Arkansas - Fayetteville. This year I have been working with State Equine Specialist, Dr. Mark Russell, to conduct a series of studies about the Arkansas horse 4-H program to fulfill my Master's thesis.

I am seeking to reach the Extension staff associated with 4-H programs in your county to learn more about the level of equine interest that exists among your clubs. The short survey below provides an opportunity to describe the level of equine interest among 4-H members in your county, and will provide a valuable database for future research efforts.

This email may be forwarded as necessary to the appropriate staff in your county.

The following short survey also functions as a recruitment tool for an in depth survey scheduled to be distributed to Extension staff and associated volunteer leaders of clubs with an equine emphasis, January 2017.

By completing the following survey you will learn more about the upcoming survey (if applicable), have an opportunity to accept/decline participating, and have the opportunity to provide contact information for volunteer leaders associated with the horse-focused club(s).

### Follow this link to the Survey:

\$\{1://SurveyLink?d=Take the survey\}

Or copy and paste the URL below into your internet browser: \$\{1:\/\SurveyURL\}

Feel free to contact me via text, call or email with an questions or comments.

Sincerely,

### Fawn Kurtzo

Graduate Assistant, Bumpers College Dean's Office
University of Arkansas
Department of Agricultural Education, Communications and Technology
230 Agriculture Building
(XXX) XXX-XXXX

Article 3: Appendix C.

Qualification Questionnaire

Qualification Questionnaire

Q1 Please enter the following information before describing the level of horse interest that exists among youth in your county.
UAEX email address (1) County (2)
Q2 Do 4-H clubs, or members of 4-H clubs in your county participate in any horse related activities or competitions?
<ul><li>Q Yes (1)</li><li>Q No (2)</li></ul>
If Yes Is Selected, Then Skip To Which of the following best describesIf No Is Selected, Then Skip To End of Survey
Q3 Which of the following best describes the level of horse interest that exists in your 4-H club(s)?
☐ Our county has a horse project club. (1)
<ul> <li>□ Our county has a broader club (i.e. community club) with a horse related component. (2)</li> <li>□ Our county does not have a horse project club or broader club with a horse component; however, some youth have horse projects and/or compete in horse related activities/competitions. (3)</li> </ul>
If Our county has a horse proj Is Selected, Then Skip To You are eligible to participate in aIf Our county has a broader cl Is Selected, Then Skip To You are eligible to participate in aIf Our county does not have a Is Selected, Then Skip To End of Survey
Q4 You are eligible to participate in a survey developed for Extension staff and volunteer leaders of horse focused 4-H clubs throughout the state. The survey will take about 20 minutes, will be available electronically or by mail, there are no right or wrong answers and all participants will remain anonymous in data analysis, findings and results. Participants are being recruited November 29 - December 16, and the survey will be distributed January 2017. If you are willing to participate please select how you prefer to receive the survey.
O I prefer to receive the survey electronically. (1)
O I prefer to receive the survey by mail. (2)
O I prefer not to participate, but will provide volunteer leader contact information. (3)
O I prefer not to participate, nor provide volunteer leader contact information. (4) If I prefer not to participate Is Selected, Then Skip To End of SurveyIf I prefer to receive the
sur Is Selected, Then Skip To You selected that you prefer to receiIf I prefer to receive the
sur Is Selected, Then Skip To I am seeking to reach out to the voluIf I prefer not to
participate Is Selected, Then Skip To I am seeking to reach out to the volu

Q5 You selected that you prefer to receive the survey via mail. Please provide your address below:

```
Name (1)
Address (2)
Address 2 (3)
City (4)
State (5)
Postal code (6)
```

Q6 I am seeking to reach out to the volunteer leaders (VL) of the horse focused 4-H club to ask if they are willing to participate, and if so, which format they prefer to receive the survey. You may provide their contact information below, ask that I request it from you via email at a later time or state that you prefer not to provide VL(s) contact information.

```
VL 1 Name (1)
VL 1 Email Address (2)
VL 1 Phone Number (3)
VL 2 Name (4)
VL 2 Email Address (5)
VL 2 Phone Number (6)
Please contact me via email to request VL contact information. If applicable, please answer "yes". (7)
```

I prefer not to provide VL contact information. If applicable, please answer "yes". (8)

Article 3: Appendix D.

Volunteer Leader Email Recruitment

Carbon copy state equine specialist and local county agent in all emails.

### **Volunteer Leader Recruitment Email #1**

Dear [NAME]

I am Fawn Kurtzo, a second year graduate student at the University of Arkansas – Fayetteville. This year I have been working with State Equine Specialist, Dr. Mark Russell, to conduct a series of studies about the horse 4-H clubs throughout the state to fulfill my Master's thesis.

I am excited to share a survey with all county agents, program assistants and volunteer leaders throughout the state who are associated with 4-H clubs with an equine emphasis. After learning about the study, [NAME] has provided me with your contact information.

The survey will take about 20 minutes, will be available electronically or by mail, there are no right or wrong answers, and all participants will remain anonymous in data analysis, findings and results.

The study aims to determine the benefits, needs and challenges you perceive to be associated with the 4-H club you are currently involved with. In addition to the benefits, needs, challenges you associate with the club, this study also seeks to determine your communication tendencies and preferences in regard to horse and 4-H club materials.

Are you interested in participating in this survey?

If so, please reply specifying whether you prefer to receive the survey electronically (mobile-friendly) mailed hard copy with a return envelope.

If you prefer to receive a mailed survey, please include your address.

I am recruiting participants through December 16<sup>th</sup>, and will distribute the survey shortly after the first of the new year.

Please don't hesitate to contact me via email, text or call if you have any questions.

Sincerely,

Fawn Kurtzo

Graduate Assistant, Bumpers College Dean's Office

University of Arkansas

Low hote

Department of Agricultural Education, Communications and Technology

230 Agriculture Building

(XXX) XXX-XXXX

#### **Volunteer Leader Recruitment Email #2**

Dear [NAME]

I am reaching back out to extend the opportunity to participate in a survey tailored for volunteer leaders and county agents of 4-H clubs with a horse component and/or horse project clubs.

As a reminder, I am Fawn Kurtzo, a second year graduate student at the University of Arkansas – Fayetteville. This year I have been working with State Equine Specialist, Dr. Mark Russell, to conduct a series of studies about the horse 4-H clubs throughout the state to fulfill my Master's thesis.

After learning about the study, [NAME] has provided me with your contact information.

The survey will take about 20 minutes, will be available electronically or by mail, there are no right or wrong answers, and all participants will remain anonymous in data analysis, findings and results.

The study aims to determine the benefits, needs and challenges you perceive to be associated with the 4-H club you are currently involved with. In addition to the benefits, needs, challenges you associate with the club, this study also seeks to determine your communication tendencies and preferences in regard to horse and 4-H club materials.

Are you interested in participating in this survey?

If so, please reply specifying whether you prefer to receive the survey electronically (mobile-friendly) mailed hard copy with a return envelope.

If you prefer to receive a mailed survey, please include your address.

I am recruiting participants through December 16<sup>th</sup>, and will distribute the survey shortly after the first of the new year.

Please don't hesitate to contact me via email, text or call if you have any questions.

Sincerely,

**Fawn Kurtzo** 

Graduate Assistant, Bumpers College Dean's Office

University of Arkansas

Laur Hote

Department of Agricultural Education, Communications and Technology

230 Agriculture Building

((XXX) XXX-XXXX

#### **Volunteer Leader Recruitment Email #3**

#### Dear [NAME]

I am in the final week of recruiting participants for the January 2017 horse 4-H survey. As a quick reminder, this survey has been developed specifically for Extension staff and volunteer leaders associated with horse 4-H clubs throughout the state.

The study aims to determine the benefits, needs and challenges you perceive to be associated with the club. In addition to the benefits, needs and challenges you associate with the club, this survey also seeks to determine your communication tendencies and preferences in regard to horse and 4-H club materials.

If you are interested in participating in this survey, please specify whether you prefer to receive it via email or a mailed hard copy with a return envelope.

If you prefer to receive a mailed survey, please include your address.

Do not hesitate to contact me via email, text or phone call if you have any questions.

Sincerely,

Fawn Kurtzo

Graduate Assistant, Bumpers College Dean's Office

University of Arkansas

Laur Ho

Department of Agricultural Education, Communications and Technology

230 Agriculture Building

(XXX) XXX-XXXX

#### **Volunteer Leader Telephone Script**

Hello [Name]:

I am Fawn Kurtzo, a second year graduate student at the University of Arkansas – Fayetteville. This year I have been working with Dr. Mark Russell to conduct a series of studies about the horse 4-H clubs throughout the state to fulfill my Master's thesis. I have received your contact information from (name), your local county agent.

I am calling today to see if you're interested in participating in a survey available for all county agents, program assistants and volunteer leaders of horse 4-H clubs throughout the state. The study aims to determine the benefits, needs and challenges you perceive to be associated with the horse 4-H club you are currently involved with. In addition to the benefits, needs, challenges you associate with the horse 4-H club, this study also seeks to determine your communication tendencies and preferences in regard to horse and 4-H club materials.

The survey will take about 20 minutes, will be available electronically or by mail, there are no right or wrong answers, and all participants will remain anonymous in data analysis, findings and results.

I aim to finalize a participant population by December 16<sup>th</sup>, and distribute the survey shortly after the first of the new year.

Are you interested in participating in this survey?

No: Thank you for your consideration.

Yes: Do you prefer an electronic or mailed hard copy?

I may be reached via email at fkurtzo@uark.edu or text or call at 870-754-9092 anytime. Please do not hesitate to let me know if you have any questions or concerns.

Thank you.

Article 3: Appendix E.

Survey Prenotice



# Department of Agricultural Education, Communications and Technology



205 Agriculture Building, 1 University of Arkansas, Fayetteville, AR 72701-1201 479-575-2035 • Fax: 479-575-2601 • http://aect.uark.edu

#### Dear Participant,

Thank you for your interest in this study. The Division of Agriculture is seeking your advice to better support and understand the current situations horse 4-H clubs throughout the state are facing.

Over the past five years, the state 4-H horse show has experienced exponential growth. In addition, 4-H members now have camps, competitions, and educational opportunities throughout the state specifically dedicated to equine projects. The goal of this study is to learn more about the needs of our volunteer leaders and Extension staff, the strengths and weaknesses of the programs, and the value our youth and communities gain from equine clubs. In the long run, this research aims to provide valuable feedback and first-hand suggestions to program managers to better guide sustainable growth and improvement among equine 4-H clubs at a state-wide level.

The survey you will be receiving in the near future aims to describe the benefits, needs and challenges you perceive to be associated with the horse project 4-H club or community club with a horse component you are currently involved with. In addition to the benefits, needs and challenges you associate with the club, the study also seeks to determine your communication preferences in regard to horse and 4-H club materials.

Your survey will be distributed January 10<sup>th</sup> in the same manner you are receiving this announcement. If you would like to request any changes, please contact Fawn.

Your advice and perspective are highly valued. To learn more about the study or how you can be involved please contact us, we are happy to address any questions, concerns or comments. For questions about one's rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ro Windwalker, the University of Arkansas' Compliance Coordinator, at (479) 575-2208 or email irb@uark.edu.

Sincerely,

Fawn Kurtzo Graduate Student

Dale Bumpers College of Agriculture, Food

and Life Sciences

University of Arkansas

(XXX) XXX-XXXX

fkurtzo@uark.edu

Mark Russell

Assistant Professor and Equine Specialist University of Arkansas – Division of

Agriculture

(XXX) XXX-XXXX

Mark Phursell

mrrussell@uaex.edu

Article 3: Appendix F.

Full Electronic Survey

## 2017 Extension Staff and Volunteer Leader Survey

Q1 Please enter the following information before beginning the survey.
Email address (1) County (2)
County (2)
Q2 Participant Identification Please select whether you are currently an Extension staff member
or volunteer leader associated with the horse 4-H program.
O Extension Staff (1)
O Volunteer Leader (2)
O I am not currently associated with a horse project 4-H club or community club with a horse component. (Thank you for your consideration, you may discontinue completing the survey.) (3)
If Extension Staff Is Selected, Then Skip To Participant Identification Please desIf Volunteer
Leader Is Selected, Then Skip To End of Block If I am not currently associat Is Selected, Then
Skip To End of Survey
Q3 Participant Identification Please describe your position and percentage of your appointment. (Ex. Agent - 50% FCS and 50% 4-H; Program Assistant - 100% 4-H etc.)
Q4 Club Demographics The following questions aim to provide a description of your current horse-related 4-H club.
How many youth members are currently enrolled? Please fill in the blank. (1)
How many youth members are active? Please fill in the blank. (2)
Q5 Do you have inactive members?
<b>O</b> Yes (1)
O No (2)
If Yes Is Selected, Then Skip To Club Demographics Why do you believeIf No Is Selected, Then Skip To End of Block

Q6 Why do you believe the inactive members are not more involved? Please explain.

Q7 Experience with Your Horse-Related 4-H Club Please select the choice that best indicates your experience with the current horse-related 4-H club, from Very Unsatisfied to Very Satisfied.

	Very Unsatisfied (1)	Unsatisfied (2)	Somewhat Unsatisfied (3)	Somewhat Satisfied (4)	Satisfied (5)	Very Satisfied (6)
1 (1)	•	0	0	0	0	0

Q8 Please describe why you feel this way.

Q9 Youth Impacts Please select the choice that best indicates your opinion of the benefits youth receive by being members of your club, from Strongly Disagree to Strongly Agree.

Members receive the following benefits:

	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)
EXPERIENCES						
- Community service/volunteering (1)	0	O	0	0	•	•
- Competitions (2)	<b>O</b>	O	O	O	0	O
- Exposure to equine opportunities and professionals (3)	0	O	•	O	0	•
- Gaining equine knowledge (4)	•	•	<b>O</b>	<b>O</b>	<b>O</b>	O
- Providing a place to belong (5)	O	O	O	O	O	C
LIFE SKILLS						
- Accepting differences (6)	<b>O</b>	<b>O</b>	O	<b>O</b>	<b>O</b>	O
- Character growth (7)	<b>O</b>	<b>O</b>	<b>O</b>	O	<b>O</b>	O
- Improved problem solving (8)	<b>O</b>	<b>O</b>	O	<b>O</b>	<b>O</b>	O
- Improved teamwork (9)	<b>O</b>	•	<b>O</b>	O	•	O
- Increased concern for others (10)	<b>O</b>	<b>O</b>	<b>O</b>	O	<b>O</b>	O
- Increased confidence (11)	<b>O</b>	O	O	O	<b>O</b>	O
- Setting goals (12)	0	0	O	O	0	O
OTHER, fill in below:						
(optional) (13)	0	O	O	O	O	O
(optional) (14)	<b>O</b>	O	O	O	O	O
(optional) (15)	•	<b>O</b>	O	O	<b>O</b>	O
(optional) (16)	0	O	<b>O</b>	0	O	<b>O</b>

Q10 Community Benefits Please select the choice that best indicates you opinion of the benefits you perceive the community gains in relation to your club, from Strongly Disagree to Strongly Agree.

The community receives the following benefits:

The community receiv	• • • • • • • • • • • • • • • • • • •	ing concints.				
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)
A sense of pride (Ex. recognition in newspapers, social media, support during fundraisers, etc.) (1)	O	O	O	0	•	0
Community service/volunteering (2)	•	0	•	0	•	0
Educational opportunities (Ex. fair booth, shows or exhibits that are open to the public, speeches, published content, etc.) (3)	O	O	O	0	O	O
OTHER, fill in below:						
(optional) (4)	O	O	O	<b>O</b>	•	O
(optional) (5)	O	O	O	<b>O</b>	O	O
(optional) (6)	O	O	O	<b>O</b>	•	O
(optional) (7)	O	O	O	0	0	O

Q11 Horse-Related 4-H Club Challenges Please select the choice that best indicates you opinion of challenges within the club, from Strongly Disagree to Strongly Agree.

## Challenges within the club include:

enunenges within the						
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)
Commitment of owning a horse is too burdensome (1)	0	0	•	0	0	O
Geographic isolation which restricts the ability to participate in 4-H functions (2)	O	0	0	0	0	•
Internal leadership positions become stagnant and restrict positive change (3)	O	•	•	•	•	•
Issues with insurance/liability at events (4)	O	0	•	O	O	O
Local opportunities such as shows, camps or clinics are too expensive to provide (5)	O	O	O	O	O	•
Making adjustments based on the loud voices of a few individuals rather than collective interests (6)	•	•	•	•	•	•
Parents are not willing to engage at the level needed (7)	O	0	O	O	O	0
Parents do not have time to engage at the level needed (8)	O	0	•	O	0	•

Participating in 4-H shows, clinics or camps is too expensive (9)	O	O	O	•	O	0
Proper equipment for 4-H shows, clinics or camps is too expensive (10)	O	O	•	•	O	0
Purchasing and maintaining a horse is too expensive (11)	O	O	•	•	O	0
Restriction of positive change due to external political pressure (12)	O	O	•	•	O	•
Riding opportunities are often restricted by weather (13)	O	O	•	•	O	0
Specific horse events create a sense of division among club members (14)	O	O	O	O	O	0
Specific horse events create a sense of division of our club from other horse 4-H clubs (15)	O	Q	O	O	O	O
Traveling to shows, clinics or camps is too expensive (16)	O	•	•	O	<b>O</b>	•
Youth are highly involved with other activities which restricts participation in club activities (17)	•	•	•	•	•	•
OTHER, fill in below:						
(optional) (18)	O	0	0	O .	0	O

(optional) (19)	O	0	O	O	O	O
(optional) (20)	O	0	O	<b>O</b>	0	O
(optional) (21)	O	0	O	<b>O</b>	0	O

## Display This Question:

If Participant Identification Please select whether you are currently an Extension staff member or volunteer leader associated with the horse 4-H program. Extension Staff Is Selected

Q12 Extension Staff Challenges Please select the choice that best indicates you opinion of the following challenges, from Strongly Disagree to Strongly Agree.

## Challenges I face include:

	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)
4-H is not my area of expertise (1)	<b>O</b>	O	O	<b>O</b>	O	O
Horse knowledge is not my area of expertise (2)	•	•	O	0	•	O
I feel administration doesn't provide proper support (3)	O	0	•	•	O	•
I feel uncomfortable working with people in the horse industry (4)	O	0	O	0	O	•
I feel volunteer leader do not seek to develop a relationship with me (5)	O	•	O	O	O	•
- Inadequate training (6)	<b>O</b>	O	<b>O</b>	<b>O</b>	O	O
- Lack of time due to multiple job duties (7)	O	0	O	0	O	<b>O</b>

- Shortage of educational materials (8)	0	0	•	0	•	•
- Shortage of finances (9)	O	O	<b>O</b>	<b>O</b>	<b>O</b>	O
- Under-developed personal skills (10)	<b>O</b>	O	O	O	<b>O</b>	O
OTHER, fill in below:						
(optional) (11)	<b>O</b>	O	•	<b>O</b>	<b>O</b>	O
(optional) (12)	<b>O</b>	O	•	0	•	O
(optional) (13)	•	O	•	0	<b>O</b>	O
(optional) (14)	O	O	<b>O</b>	O	0	O

## Display This Question:

If Participant Identification Please select whether you are currently an Extension staff member or volunteer leader associated with the horse 4-H program. Volunteer Leader Is Selected

Q13 Volunteer Leader Challenges Please select the choice that best indicates you opinion of the following challenges, from Strongly Disagree to Strongly Agree.

## My challenges include:

	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)
Developing educational materials for each club meeting is difficult (1)	O	0	0	O	0	•
Learning about club opportunities too late to properly prepare (2)	O	0	O	•	0	•
Lacking the time to achieve all I desire with the club (3)	O	0	O	0	0	•
Members are too difficult to motivate (4)	O	•	O	0	•	0

My county agent is not helpful (5)	0	0	0	0	0	0
Other volunteer leaders are not helpful (6)	<b>O</b>	<b>O</b>	•	<b>O</b>	<b>O</b>	•
Parents are not helpful (7)	<b>O</b>	•	<b>O</b>	•	•	O
Poor communication with parents makes it difficult to schedule meetings or activities (8)	O	O	•	O	O	0
Spending too much time reminding parents of upcoming meetings or activities (9)	Q	O	Q	Q	Q	O
Struggling to complete mandatory annual volunteer leader training (10)	O	O	0	O	O	O
<b>OTHER</b> , fill in below:						
(optional) (11)	0	O	O	0	O	O
(optional) (12)	0	0	0	0	0	O
(optional) (13)	O	O	O	O	O	<b>O</b>
(optional) (14)	•	O	0	O	O	O

Q14 Challenges, Continued Are there any additional challenges associated with the club which have not been included in the survey? Please explain.

Q15 Do you face any form of conflict associated with the club? Please explain.

Q16 Club Needs Please select the choice that best indicates you opinion of club needs, from Strongly Disagree to Strongly Agree.

## Our club needs more:

	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)
Access to a suitable, convenient riding facility (1)	0	•	0	O	O	•
Access to proper equipment (Ex. tack, training aids, clothes, etc.) (2)	O	•	•	•	0	•
Community Support (3)	<b>O</b>	O	<b>O</b>	O	O	O
Competitive horses (4)	O	O	<b>O</b>	O	O	O
Educational materials (Ex. worksheets) (5)	0	O	•	O	O	•
Educational resources (Ex. databases) (6)	0	•	•	O	O	•
Local competitions (7)	O	O	O	0	O	O
Local educational opportunities (Ex. guest speakers, clinics, seminars, etc.) (8)	0	O	O	O	O	•
Parental support (9)	O	O	O	O	O	O
Safe horses (10)	<b>O</b>	O	<b>O</b>	O	O	<b>O</b>
Volunteer leaders (11)	O	O	<b>O</b>	O	0	O
Youth enrollment (12)	<b>O</b>	O	<b>O</b>	O	O	O
OTHER, fill in below:						

(optional) (13)	0	0	0	0	0	0
(optional) (14)	O	O	<b>O</b>	<b>O</b>	<b>O</b>	O
(optional) (15)	O	O	<b>O</b>	<b>O</b>	<b>O</b>	O
(optional) (16)	O	O	<b>O</b>	O	<b>O</b>	O

Q17 Volunteer Leader Needs Please select the choice that best indicates you opinion of the following needs among volunteer leaders, from Strongly Disagree to Strongly Agree.

In my opinion volunteer leaders need:

in my opinion voluntee	n my opinion volunteer leaders need:								
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)			
4-H structure training (Ex. methods of conducting meetings) (1)	•	O	O	O	O	O			
A database of local resources (Ex. facilities, equine professionals, medical assistance, farriers, competitive opportunities, etc.)  (2)	•	O	O	O	O	O			
Assistance with annual registration of club members (3)	<b>O</b>	•	•	•	•	•			
Educational resources about competition processes, requirements or regulations (4)	•	O	O	O	O	O			
Equine 4-H specific monthly update (Ex. clinics, camps, etc.) (5)	0	•	•	0	O	0			
Fundraising assistance/support (6)	•	0	0	0	•	0			
Instructor/training supplies (Ex. cones,	0	0	0	0	•	O			

lunge lines, helmets, etc.) (7)						
More flexible annual training options (8)	•	O	O	0	0	0
More information about non-riding activities or competitive opportunities (9)	0	O	O	O	•	0
Teaching aids (Ex. meeting lesson plans, content, games, etc.) (10)	0	•	•	O	O	•
Youth recruitment aids (11)	O	O	O	O	O	O
OTHER, fill in below:						
(optional) (12)	<b>O</b>	0	0	0	<b>O</b>	O
(optional) (13)	O	O	O	O	O	O
(optional) (14)	O	O	O	O	O	O
(optional) (15)	0	O	O	O	<b>O</b>	<b>O</b>

## Display This Question:

If Participant Identification Please select whether you are currently an Extension staff member or volunteer leader associated with the horse 4-H program. Volunteer Leader Is Selected

Q18 Extension Staff Support Please select the choice that best indicates you opinion regarding the level of support your Extension staff with 4-H responsibilities provides, from Strongly Disagree to Strongly Agree.

## My county agent/program assistant:

	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)
Assists with meetings (1)	O	<b>O</b>	<b>O</b>	<b>O</b>	<b>O</b>	O
(Is) involved with club activities (2)	O	O	O	O	O	<b>O</b>
Participates in club competitions (Ex.	O	O	O	•	<b>O</b>	<b>O</b>

		I	I			
ORAMAs, shows, etc.) (3)						
Provides registration assistance (4)	•	0	0	O	O	0
Secures additional funding for my club (5)	•	0	0	O	O	•
(Is a) SOURCE OF						
INFORMATION FOR:						
- 4-H structure and methods (6)	<b>O</b>	O	O	<b>O</b>	O	O
- Club opportunities (7)	<b>O</b>	O	<b>O</b>	<b>O</b>	<b>O</b>	O
- Equine knowledge (8)	<b>O</b>	O	<b>O</b>	<b>O</b>	<b>O</b>	O
- Local resources (Ex. Guest speakers, specialized programs, etc.) (9)	Q	Q	•	O	O	•
Stays out of my way (10)	<b>O</b>	O	O	<b>O</b>	<b>O</b>	O
OTHER, fill in below:						
(optional) (11)	<b>O</b>	O	O	O	O	<b>O</b>
(optional) (12)	0	O	O	0	0	<b>O</b>
(optional) (13)	0	O	O	0	0	<b>O</b>
(optional) (14)	O	O	O	O	0	O

Q19 Strengths Please select the choice that best indicates you opinion of strengths associated with your club, from Strongly Disagree to Strongly Agree.

Strengths associated with my club include:

	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)
Club has a diverse interest in disciplines and competitive activities (1)	O	O	O	O	•	0
Community members are willing to volunteer and educate club members (2)	•	•	•	0	•	•
Fundraising efforts are successful (3)	<b>O</b>	<b>O</b>	<b>O</b>	<b>O</b>	•	O
Hold regular meetings (4)	O	O	O	<b>O</b>	O	O
Local competitive opportunities (5)	O	O	O	<b>O</b>	O	O
Local riding facilities/opportunities (6)	O	O	O	0	•	0
Meeting content is educational (7)	O	O	O	<b>O</b>	O	O
Meeting content is fun (8)	O	O	O	O	O	O
Multiple fundraising opportunities (9)	O	O	O	O	O	O
Parents are highly involved (10)	O	O	O	<b>O</b>	O	O
Strong and consistent community outreach (11)	0	0	0	•	•	0
Successful new member recruitment (12)	O	O	O	0	<b>O</b>	0
Successful organization and	•	•	•	•	•	<b>O</b>

planning of club activities (13)						
Volunteer leaders are focused (14)	0	O	O	<b>O</b>	<b>O</b>	O
Volunteer leaders work cohesively (15)	O	<b>O</b>	O	O	<b>O</b>	O
Wealth of horse knowledge exists in the community (16)	•	•	0	•	•	<b>O</b>
Youth are highly motivated (17)	O	O	O	O	<b>O</b>	O
Youth are interested in horses (18)	O	O	O	O	<b>O</b>	O
OTHER, fill in below:						
(optional) (19)	O	<b>O</b>	<b>O</b>	<b>O</b>	<b>O</b>	O
(optional) (20)	O	O	O	O	<b>O</b>	O
(optional) (21)	O	O	O	O	<b>O</b>	O
(optional) (22)	O	O	O	O	<b>O</b>	O

Q20 Communication: How Do You Currently Receive Information? Please select the choice that best indicates your experience receiving information through the following outlets, from Never to Always.

I currently receive information about horse-related 4-Hclub opportunities through:

j			11		(-)
	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
4-H online (1)	O .	O .	<b>O</b>	O	•
Emailed monthly newsletter (2)	<b>O</b>	<b>O</b>	•	<b>O</b>	O
Email notice (3)	O	O	•	O	•
Mailed monthly newsletter (4)	<b>O</b>	<b>O</b>	•	<b>O</b>	•
Phone call (5)	O	O	•	O	•
COOPERATIVE EXTENSION SERVICE WEBSITE:					
- 4-H calendar (6)	O	O	O	O	•
- Youth and development section (7)	•	•	0	0	0
SOCIAL MEDIA					
- Facebook (8)	O	O	<b>O</b>	O	•
- Instagram (9)	O	O	•	O	•
- Twitter (10)	<b>O</b>	<b>O</b>	•	O	O
Text message (11)	O	O	<b>O</b>	O	•
OTHER, fill in below:					
(optional) (12)	<b>O</b>	<b>O</b>	•	O	•
(optional) (13)	<b>O</b>	<b>O</b>	•	<b>O</b>	•
(optional) (14)	<b>O</b>	<b>O</b>	•	<b>O</b>	•
(optional) (15)	O	O	•	<b>O</b>	O

Q21 Communication: How Do You Prefer To Receive Information? Please use drag and drop to
rank your preference of information outlets when receiving updates about horse-related 4-H club
opportunities, from Most Preferred (1- top of list) to Least Preferred (8- bottom of list).
Email notice (1)
Emailed monthly newsletter (2)
Mailed monthly newsletter (3)
Phone call (4)
Researching 4-H online (5)
Researching on the Cooperative Extension Service website (6)
Social media (7)
Text message (8)
Q22 Are there any additional information outlets you prefer to receive information about horse-related 4-H club opportunities that were not listed above? If so, briefly describe below.
Q23 Why do you most prefer the number 1 outlet? Briefly describe below.
Q24 Why do you least prefer the number 8 outlet? Briefly describe below.
Q25 Do you have any suggestions for more convenient methods of learning about horse-related 4-H club opportunities? If so, please describe below.

Q26 Communication: How Do You Share Information With Others? Please select the choice that best represents your experience sharing information about horse-related 4-H club opportunities or successes through each outlet, from Never to Always.

I share information about club opportunities or successes through:

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
Electronic 4-H newsletter (1)	0	0	0	0	0
Email (2)	O	0	O	•	O
Magazine (3)	O	<b>O</b>	O .	O	O
Mailed 4-H newsletters (4)	<b>O</b>	O	•	O	O
Newspaper (5)	O	0	O .	O	O
Phone call (6)	O	0	O	O	O
Radio (7)	O	0	O .	O	O
SOCIAL MEDIA					
- Facebook (8)	O	0	O .	•	O
- Instagram (9)	O	0	O .	•	O
- Twitter (10)	O	0	O .	•	O
Television (11)	O	0	O .	•	O
Text (12)	O	0	O .	•	O
Walk in/in person (13)	O	•	•	•	0
Website (14)	<b>O</b>	0	•	O	O
Word of mouth (15)	O	•	•	•	0
OTHER, fill in below:					
(optional) (16)	<b>O</b>	0	•	O	O
(optional) (17)	<b>O</b>	0	•	•	O
(optional) (18)	<b>O</b>	0	•	•	O
(optional) (19)	O	O	O	O	O

Q27 Communication: What Types of Messages Do You Share With Others? Please select the choice that best represents your experience communicating the following types of messages, from Never to Always.

## I share messages such as:

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
Calendar of events (1)	0	•	0	O	O
Clinics/seminars (2)	O	•	•	O	O
Meetings (3)	O	0	O	O	O
Fundraisers (4)	O	O	O .	O	O
Positive community outreach (Ex. competition successes, fundraising successes, community involvement, etc.)  (5)	0	•	•	0	•
Recruitment members (6)	O	•	•	O	<b>O</b>
Recruiting volunteers (7)	O	•	•	O	O
Registration and deadlines (8)	O .	•	•	•	O
OTHER, fill in below:					
(optional) (9)	O	<b>O</b>	O	•	O
(optional) (10)	O	<b>O</b>	O	O	O
(optional) (11)	O	<b>O</b>	•	O	<b>O</b>
(optional) (12)	O	•	O .	•	O

Q28 Areas of Acquiring Equine Information Please select the choice that best represents your experience utilizing the following sources to gain knowledge about horse-related topics, from Never to Always.

I gain knowledge about equine-related topics from:

r gum knowledge about equin	1		Sometimes		
	Never (1)	Rarely (2)	(3)	Often (4)	Always (5)
BREED					
ASSOCIATIONS:					
- American Quarter Horse Association (AQHA) (1)	•	•	•	<b>O</b>	O
- Other (fill in) (2)	•	<b>O</b>	<b>O</b>	<b>O</b>	O
- Other (fill in) (3)	•	0	0	0	O
- Other (fill in) (4)	•	0	0	0	O
COMMUNITY RESOURCES					
- Farriers (5)	•	<b>O</b>	O	0	O
- "Horse people" (6)	•	<b>O</b>	<b>O</b>	0	O
- Trainers (7)	•	<b>O</b>	<b>O</b>	0	O
- Vets (8)	•	O	O	O	O
COOPERATIVE EXTENSION SERVICE					
- County Extension agents (9)	O	<b>O</b>	<b>O</b>	<b>O</b>	O
- State equine specialist (10)	O	<b>O</b>	<b>O</b>	<b>O</b>	O
- Website (11)	•	<b>O</b>	<b>O</b>	<b>O</b>	O
Magazines, books or other paper sources (12)	O	<b>O</b>	O	<b>O</b>	O
Other equine Extension programs (13)	O	O	O	<b>O</b>	O
Other universities (14)	O	•	•	•	O
Parent(s) of club members (15)	0	<b>O</b>	0	<b>O</b>	O
Personal knowledge (16)	•	•	•	•	O
Personal research online (17)	O	O	<b>O</b>	<b>O</b>	O
Seminars, clinics or shows (18)	0	0	0	0	<b>O</b>

Videos or TV shows (19)	O	0	O	0	0
Volunteer leader(s) (20)	<b>O</b>	O	0	O	O
<b>OTHER</b> , fill in below:					
(optional) (21)	<b>O</b>	O	0	O	O
(optional) (22)	<b>O</b>	O	0	O	O
(optional) (23)	<b>O</b>	O	0	O	O
(optional) (24)	<b>O</b>	O	0	O	O

Q29 Areas of Interest in Equine Information Please select the choice that best represents your experience seeking the following horse related topics, from Never to Always.

I seek equine-related knowledge about:

	Never (1)	Rarely (2)	Sometimes (3)	Often	Always (5)
		Raiciy (2)	Sometimes (3)	(4)	Aiways (3)
HIPPOLOGY					
- Equine anatomy (1)	O	O	O	0	O
- Equine nutrition (2)	O	O	•	O	<b>O</b>
- Leatherwork/saddlery (3)	0	O	•	O	O
- Medical/veterinary (4)	O	<b>O</b>	O	•	O
Horse judging (5)	O	O	O	O	O
Horsemanship principles/skills (6)	O	O	•	O	O
RIDING DISCIPLINES					
- English (7)	O	O	O	0	O
- Ranch (8)	O	O	•	•	<b>O</b>
- Speed (9)	O	O	O	0	O
- Western (10)	O	O	O	0	O
Show guidelines (11)	O	O	•	•	O
Show operations (12)	O	O	•	O	<b>O</b>
Training techniques (13)	O	O	•	O	O
<b>OTHER,</b> fill in below:	O	O	O	O	O
(optional) (14)	O	O	•	O	O
(optional) (15)	O	O	O	O	O
(optional) (16)	O	O	O	O	O
(optional) (17)	O	O	O	O	O

Q30 Competency Levels Please select the choice that best represents your ability, knowledge or skill level to successfully perform or educate other about the following topics, from Very Incompetent to Very Competent.

How competent do you feel about the following topics?

Tiow competent do ye			F			
	Very Incompete nt (1)	Incompete nt (2)	Somewhat Incompete nt (3)	Somewh at Compete nt (4)	Compete nt (5)	Very Compete nt (6)
Demonstration competitions (1)	<b>O</b>	0	<b>O</b>	<b>O</b>	<b>O</b>	O
HIPPOLOGY						
- Equine anatomy (2)	<b>O</b>	<b>O</b>	<b>O</b>	<b>O</b>	<b>O</b>	<b>O</b>
- Equine nutrition (3)	•	•	•	<b>O</b>	<b>O</b>	O
Leatherwork/saddl ery (4)	0	0	0	•	•	0
Medical/veterinary (5)	•	•	•	•	•	<b>O</b>
Horse judging (6)	0	0	0	0	O	O
Horsemanship principles/skills (7)	•	•	•	0	0	<b>O</b>
Public speaking (8)	O	<b>O</b>	<b>O</b>	O	<b>O</b>	O
RIDING DISCIPLINES						
- English (9)	O	<b>O</b>	<b>O</b>	O	O	<b>O</b>
- Ranch (10)	O	<b>O</b>	<b>O</b>	O	O	O
- Speed (11)	O	<b>O</b>	<b>O</b>	O	O	O
- Western (12)	<b>O</b>	<b>O</b>	<b>O</b>	•	•	O
Show guidelines/regulati ons (13)	0	O	O	0	0	<b>O</b>
Show operations (14)	<b>O</b>	0	•	•	•	O

Training techniques (15)	0	0	0	0	0	O
OTHER, fill in below:						
(optional) (16)	0	O	O	O	O	O
(optional) (17)	•	O	O	<b>O</b>	<b>O</b>	O
(optional) (18)	•	O	O	0	0	0
(optional) (19)	O	O .	O .	O	O	O

Q31 Opportunity to Make Additional Remarks This survey focused on your experience with the current horse-related 4-H club you are involved with. If you have any additional remarks or suggestions which stem from the past, present or intent on future involvement with a horse 4-H club please utilize the space provided below.

Opportunity to make additional remarks, open response.

Q32 Demographics The following questions are designed to provide insight on your demographic information.

Ag	e
$\mathbf{C}$	< 26 (1)
$\mathbf{C}$	26-30 (2)
$\mathbf{C}$	31-35 (3)
$\mathbf{C}$	36-40 (4)
$\mathbf{C}$	41-45 (5)
$\mathbf{C}$	46-50 (6)
$\mathbf{C}$	51-55 (7)
$\mathbf{C}$	56-60 (8)
$\mathbf{C}$	>60 (9)
Q3	3 Gender
$\mathbf{C}$	Male (1)
$\mathbf{C}$	Female (2)
Q3	4 What district is your horse 4-H club based?
$\mathbf{C}$	Delta (1)
$\mathbf{C}$	Ouachita (2)
$\mathbf{C}$	Ozark (3)

Q35 How long have you been in your current position?
$\mathbf{O} < 1 \text{ year } (1)$
O 1 - 5 years (2)
O 6 - 10 years (3)
O > 10  years  (4)
Q36 How long have you been involved with the horse industry?
O Do not consider myself involved (1)
O < 5 years (2)
O 5 - 10 years (3)
O 11-20 years (4)
O Since childhood (5)
Q37 How long have you been involved with 4-H?
O < 1  year  (1)
O 1 - 5 years (2)
O 6 - 10 years (3)
O 11 - 20 years (4)
O Since childhood (5)

Q38 What motivates you to continue being involved with 4-H?

Article 3: Appendix G.

Volunteer Leader Mailed Survey

#### 2017 HORSE 4-H PROGRAM EXTENSION STAFF AND VOLUNTEER LEADER SURVEY

You have been identified as potential candidate for this survey due to your current involvement with a horse-related 4-H club in Arkansas. IRB protocol # 16-05-754 was approved for this study from the University of Arkansas review committee. Your completion of the survey represents your implied consent to participate in the study. All records will be anonymous and will not reflect in any way on your personal or professional association with the Cooperative Extension Service, 4-H programs or the University of Arkansas.

This survey should take no longer than 20 minutes. If you have any questions or concerns about the study, you may contact Mark Russell at (501) 671-2190 or by email at mrrussell@uaex.edu, or Leslie Edgar at (479) 575-6770 or by email at ledgar@uark.edu. For questions or concerns about your rights as a research participant, please contact Ro Windwalker, the University's IRB Coordinator, at (479) 575-2208 or by email at irb@uark.edu.

This study aims to determine the benefits, needs and challenges you perceive to be associated with the horse-related 4-H club you are currently involved with. In addition to the benefits, needs and challenges you associate with the club, this study also seeks to determine your communication tendencies and preferences in regard to horse and 4-H club materials.

It is understood that you may have experience with horse-related 4-H clubs prior to your current club. <u>Please answer all survey questions in regard to your current horse-related 4-H club.</u> There will be an opportunity at the end of the survey to provide an open-ended response regarding any further input you may have including past experiences with horse-related 4-H clubs.

#### Participant Identification

ase select whether you are currently an Extension staff member or volunteer leader associated with the se 4-H program.
Extension Staff (proceed to next question) Volunteer Leader (skip to club demographics section, page 2)

I am not currently associated with a horse project 4-H club or community club with a horse component
(Thank you for your consideration, you may discontinue completing the survey.)

Please describe your position and percentages of your appointment. (Ex. Agent - 50% FCS and 50% 4-H; Program Assistant - 100% 4-H, etc.)

Program Assistant - 100% 4-H, etc.)

IRB #16-05-754 Approved: 10/24/2016 Expires: 05/30/2017

1 | Volunteer Leader Survey

Club Demographics	·g	
	stions aim to provide a description of your current horse-related 4-H club.	
How many youth me	nembers are currently enrolled? Please fill in the blank.	
How many youth me	nembers are active? Please fill in the blank.	
Do you have inactive	ve members?	
□ Yes (Please expla □ No	lain below)	
Why do you believe	e the inactive members are not more involved? Please explain.	

<b>Experience with</b> Please circle the n from Very Unsatis	umber that best i	ndicates your exp	erience with the co	urrent horse-relat	ed 4-H club,
Very Unsatisfied	Unsatisfied	Somewhat Unsatisfied	Somewhat Satisfied	Satisfied	Very Satisfied
1	2	3	4	5	6
Please describe w	hy you feel this w	ay.			

YOUTH IMPACTS

Please circle the number that best indicates your opinion of the benefits youth receive by being members of your club, from Strongly Disagree (1) to Strongly Agree (6).

Members receive the following benefits:	<b>g</b> Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
EXPERIENCES						
Community service/volun	teering 1	2	3	4	5	6
Competitions	1	2	3	4	5	6
Exposure to equine oppor and professionals	tunities 1	2	3	4	5	6
Gaining equine knowledge	e 1	2	3	4	5	6
Providing a place to belon	g 1	2	3	4	5	6
LIFE SKILLS						
Accepting differences	1	2	3	4	5	6
Character growth	1	2	3	4	5	6
Improved problem solving	; 1	2	3	4	5	6
Improved teamwork	1	2	3	4	5	6
Increased concern for other	ers 1	2	3	4	5	6
Increased confidence	1	2	3	4	5	6
Setting goals	1	2	3	4	5	6
OTHER, fill in below: (optional)						
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6

4 | Volunteer Leader Survey

# **Community Benefits**

Please circle the number that best indicates your opinion of benefits you perceive the community gains in relation to your club, from Strongly Disagree (1) to Strongly Agree (6).

The community receives the following benefits:	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
A sense of pride (Ex. recognition in newspapers, social media, support during fundraisers, etc.)	1	2	3	4	5	6
Community service/ volunteering	1	2	3	4	5	6
Educational opportunities (Ex. fair booth, shows or exhibits that are open to the public, speeches, published content, etc.)	1	2	3	4	5	6
OTHER, fill in below: (optional)						
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6

# Horse-Related 4-H Club Challenges

Please circle the number that best indicates your opinion of challenges within the club, from Strongly Disagree (1) to Strongly Agree (6).

Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly
		Disagree	Agree		Agree
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
1	2	3	4	5	6
. 1	2	3	4	5	6
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	1       2       3         2       3       3         3       3       3	1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4	1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3       4       5         1       2       3

# **Volunteer Leader Challenges**

Please circle the number that best indicates your opinion of challenges you face, from Strongly Disagree (1) to Strongly Agree (6).

My challenges include:	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Developing educational materials for each club meeting is difficult	1	2	3	4	5	6
Learning about club opportunities too late to properly prepare	1	2	3	4	5	6
Lacking the time to achieve all I desire with the club	1	2	3	4	5	6
Members are too difficult to motivate	1	2	3	4	5	6
My county agent is not helpful	1	2	3	4	5	6
Other volunteer leaders are not helpful	1	2	3	4	5	6
Parents are not helpful	1	2	3	4	5	6
Poor communication with parents makes it difficult to schedule meetings or activities	1	2	3	4	5	6
Spending too much time reminding parents of upcoming meetings or activities	1	2	3	4	5	6
Struggling to complete mandatory annual volunteer leader training	1	2	3	4	5	6
OTHER, fill in below: (optional)						
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6

Are there any additional cha survey? Please explain.	allenges associated with the club which have not been included in the
Do you face any form of con	nflict associated with the club? Please explain.
Do you face any form of con	nflict associated with the club? Please explain.
Do you face any form of con	nflict associated with the club? Please explain.
Do you face any form of con	nflict associated with the club? Please explain.
Do you face any form of con	nflict associated with the club? Please explain.
Do you face any form of con	nflict associated with the club? Please explain.
Do you face any form of con	nflict associated with the club? Please explain.
Do you face any form of con	nflict associated with the club? Please explain.
Do you face any form of con	nflict associated with the club? Please explain.
Do you face any form of con	nflict associated with the club? Please explain.
Do you face any form of con	nflict associated with the club? Please explain.
Do you face any form of con	nflict associated with the club? Please explain.

**Club Needs**Please circle the number that best indicates your opinion of club needs, from Strongly Disagree (1) to Strongly Agree (6).

Our club needs more:	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Access to a suitable, convenient riding facility	1	2	3	4	5	6
Access to proper equipment (Ex. tack, training aids, clothes, etc.)	1	2	3	4	5	6
Community support	1	2	3	4	5	6
Competitive horses	1	2	3	4	5	6
Educational materials (Ex. worksheets)	1	2	3	4	5	6
Educational resources (Ex. databases)	1	2	3	4	5	6
Local competitions	1	2	3	4	5	6
Local educational opportunities (Ex. guest speakers, clinics, seminars, etc.)	1	2	3	4	5	6
Parental support	1	2	3	4	5	6
Safe horses	1	2	3	4	5	6
Volunteer leaders	1	2	3	4	5	6
Youth enrollment	1	2	3	4	5	6
OTHER, fill in below: (optional)						
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6

**Volunteer Leader Needs** 

Please circle the number that best indicates your opinion of the following needs among volunteer leaders, from Strongly Disagree (1) to Strongly Agree (6).

As a volunteer leader, I need:	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
4-H structure training (Ex. methods of conducting meetings)	1	2	3	4	5	6
A database of local resources (Ex. facilities, equine professionals, medical assistance, farriers, competitive opportunities, etc.)	1	2	3	4	5	6
Assistance with annual registration of club members	1	2	3	4	5	6
Educational resources about competition processes, requirements or regulations	1	2	3	4	5	6
Equine 4-H specific monthly update (Ex. clinics, camps, etc.)	1	2	3	4	5	6
Fundraising assistance/support	1	2	3	4	5	6
Instructor/training supplies (Ex: cones, lunge lines, helmets, etc.)	1	2	3	4	5	6
More flexible annual training options	1	2	3	4	5	6
More information about non-riding activities or competitive opportunities	1	2	3	4	5	6
Teaching aids (Ex: meeting lesson plans, content, games, etc.)	1	2	3	4	5	6
Youth recruitment aides	1	2	3	4	5	6
OTHER, fill in below: (optional)						
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6

**Extension Staff Support** 

Please circle the number that best indicates your opinion regarding the level of support your Extension staff with 4-H responsibility provides, from Strongly Disagree (1) to Strongly Agree (6).

Мусс	ounty agent/program assistant:	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Assist	ts with meetings	1	2	3	4	5	6
(ls) in	volved with club activities	1	2	3	4	5	6
	cipates in club competitions ORAMAs, shows, etc.)	1	2	3	4	5	6
Provid	des registration assistance	1	2	3	4	5	6
	es additional funding needed for my club SOURCE OF INFORMATION FOR:	1	2	3	4	5	6
	4-H structure and methods	1	2	3	4	5	6
	Club opportunities	1	2	3	4	5	6
	Equine knowledge	1	2	3	4	5	6
	Local resources (Ex. Guest speakers, specialized programs, etc.)	1	2	3	4	5	6
Stays	out of my way	1	2	3	4	5	6
OTHE	R, fill in below: (optional)	1	2	3	4	5	6
		1	2	3	4	5	6
		1	2	3	4	5	6
_		1	2	3	4	5	6
		1	2	3	4	5	6

**Strengths**Please circle the number that best indicates your opinion of strengths associated with your club, from Strongly Disagree (1) to Strongly Agree (6).

ot. og., p.1048. de (1) to ot. og., 1g. ee (0).						
Strengths associated with my club include:	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Club has a diverse interest in disciplines and competitive activities	1	2	3	4	5	6
Community members are willing to volunteer and educate club members	1	2	3	4	5	6
Fundraising efforts are successful	1	2	3	4	5	6
Hold regular meetings	1	2	3	4	5	6
Local competitive opportunities	1	2	3	4	5	6
Local riding facilities/opportunities	1	2	3	4	5	6
Meeting content is educational	1	2	3	4	5	6
Meeting content is fun	1	2	3	4	5	6
Multiple fundraising opportunities	1	2	3	4	5	6
Parents are highly involved	1	2	3	4	5	6
Strong and consistent community outreach	1	2	3	4	5	6
Successful new member recruitment	1	2	3	4	5	6
Successful organization and planning of club activities	1	2	3	4	5	6
Volunteer leaders are focused	1	2	3	4	5	6
Volunteer leaders work cohesively	1	2	3	4	5	6
Wealth of horse knowledge exists in the community	1	2	3	4	5	6
Youth are highly motivated	1	2	3	4	5	6
Youth are interested in horses	1	2	3	4	5	6
OTHER, fill in below: (optional)						
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6
		<b>12</b>   V o L	unteer	Leadeı	- Surv	
					- u . v	- 1

# Communication: How Do You Currently Receive Information?

Please circle the number that best indicates your experience receiving information through the following outlets, from Never (1) to Always (5).

I currently receive information about horse- related 4-H club opportunities through:	Never	Rarely	Sometimes	Often	Always
4-H online	1	2	3	4	5
Emailed monthly newsletter	1	2	3	4	5
Email notice	1	2	3	4	5
Mailed monthly newsletter	1	2	3	4	5
Phone call	1	2	3	4	5
COOPERATIVE EXTENSION SERVICE WEBSITE					
4-H calendar	1	2	3	4	5
Youth and development section	1	2	3	4	5
SOCIAL MEDIA					
Facebook	1	2	3	4	5
Instagram	1	2	3	4	5
Twitter	1	2	3	4	5
Text message	1	2	3	4	5
OTHER, fill in below: (optional)					
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5

## Communication: How Do You Prefer To Receive Information?

Please provide the number that best indicates your preference of information outlets when receiving updates about horse-related 4-H club opportunities, from Most Preferred (1) to Least Preferred (8). Only use each number once.

Rank your preference of information outlets when receiving information about horse 4-H club opportunities.	Least Preferred (8) — Most Preferred (1)	Example
Email notice		3
Emailed monthly newsletter		2
Mailed monthly newsletter		7
Phone call		4
Researching 4-H online		_1_
Researching on the Cooperative Extension Service website		5
Social media		8
Text message		6

In the example, the most preferred method to receive information about horse-related 4-H club opportunities is through researching the 4-H Online website (1), whereas the least preferred method is through social media (8).

club opportun	additional information outlets you prefer to receive information about horse-related 4-H ities that were not listed above? If so, briefly describe below.
Why do you m	nost prefer the number 1 outlet? Briefly describe below.
Why do you le	east prefer the number 8 outlet? Briefly describe below.
	iny suggestions for more convenient methods of learning about horse-related 4-H club
	iny suggestions for more convenient methods of learning about horse-related 4-H club ? If so, please describe below.

## Communication: How Do You Share Information With Others?

Please circle the number that best represents your experience sharing information about horse-related 4-H club opportunities or successes through each outlet, from Never (1) to Always (5).

I share information about club opportunities or successes through:	Never	Rarely	Sometimes	Often	Always
Electronic 4-H newsletter	1	2	3	4	5
Email	1	2	3	4	5
Magazine	1	2	3	4	5
Mailed 4-H newsletter	1	2	3	4	5
Newspaper	1	2	3	4	5
Phone call	1	2	3	4	5
Radio	1	2	3	4	5
SOCIAL MEDIA					
Facebook	1	2	3	4	5
Instagram	1	2	3	4	5
Twitter	1	2	3	4	5
Television	1	2	3	4	5
Text	1	2	3	4	5
Walk in/ In person	1	2	3	4	5
Website	1	2	3	4	5
Word of mouth	1	2	3	4	5
OTHER, fill in below: (optional)					
	1	2	3	4	5
	_	-	J	•	J
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
·					

# Communication: What Types Of Messages Do You Share With Others?

Please circle the number that best represents your experience communicating the following types of messages, from Never (1) to Always (5).

I share messages such as:	Never	Rarely	Sometimes	Often	Always
Calendar of events	1	2	3	4	5
Clinics/seminars	1	2	3	4	5
Meetings	1	2	3	4	5
Fundraisers	1	2	3	4	5
Positive community outreach (Ex. competition successes, fundraising successes, community involvement, etc.)	1	2	3	4	5
Recruiting members	1	2	3	4	5
Recruiting volunteers	1	2	3	4	5
Registration and deadlines	1	2	3	4	5
OTHER, fill in below: (optional)					
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5

# Areas of Acquiring Equine Information

Please circle the number that best represents your experience utilizing the following sources to gain knowledge about horse-related topics, from Never (1) to Always (5).

	knowledge about equine-related s from:	Never	Rarely	Sometimes	Often	Always
BREE	D ASSOCIATIONS					
	American Quarter Horse Association (AQHA)	1	2	3	4	5
	Other (fill in)	1	2	3	4	5
	Other (fill in)	1	2	3	4	5
	Other (fill in)	1	2	3	4	5
COM	MUNITY RESOURCES					
	Farriers	1	2	3	4	5
	"Horse people"	1	2	3	4	5
	Trainers	1	2	3	4	5
	Vets	1	2	3	4	5
COOF	PERATIVE EXTENSION SERVICE					
	County Extension agents	1	2	3	4	5
	State equine specialist	1	2	3	4	5
	Website	1	2	3	4	5
Maga	zines, books or other paper sources	1	2	3	4	5
Othe	equine Extension programs	1	2	3	4	5
Othe	universities	1	2	3	4	5
Parer	nt(s) of club members	1	2	3	4	5

Table continued on following page.

# Areas of Acquiring Equine Information, Continued

Please circle the number that best represents your experience utilizing the following sources to gain knowledge about horse-related topics, from Never (1) to Always (5).

I gain knowledge about equine-related topics from:	Never	Rarely	Sometimes	Often	Always
Personal knowledge	1	2	3	4	5
Personal research online	1	2	3	4	5
Seminars, clinics or shows	1	2	3	4	5
Videos or TV shows	1	2	3	4	5
Volunteer leader(s)	1	2	3	4	5
OTHER, fill in below: (optional)					
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5
	1	2	3	4	5

# Areas of Interest In Equine Information

Please circle the number that best represents your experience seeking the following horse-related topics, from Never (1) to Always (5).

l se	ek equine-related knowledge about:	Never	Rarely	Sometimes	Often	Always
HIP	POLOGY					
	Equine anatomy	1	2	3	4	5
	Equine nutrition	1	2	3	4	5
	Leatherwork/saddlery	1	2	3	4	5
	Medical/veterinary	1	2	3	4	5
Hor	se judging	1	2	3	4	5
Hor	semanship principles/ skills	1	2	3	4	5
RID	ING DISCIPLINES					
	English	1	2	3	4	5
	Ranch	1	2	3	4	5
	Speed	1	2	3	4	5
	Western	1	2	3	4	5
Sho	w guidelines	1	2	3	4	5
Sho	w operations	1	2	3	4	5
Tra	ining techniques	1	2	3	4	5
OTI	HER, fill in below: (optional)					
		1	2	3	4	5
		1	2	3	4	5
		1	2	3	4	5
		1	2	3	4	5

**Competency Levels** 

Please circle the number that best represents your ability, knowledge or skill level to successfully perform or educate others about the following topics, from Very Incompetent (1) to Very Competent (6).

How competent do you feel about the following topics?	Very Incompetent	Incompetent	Somewhat Incompetent	Somewhat Competent	Competent	Very Competent
Demonstration competitions	1	2	3	4	5	6
HIPPOLOGY						
Equine anatomy	1	2	3	4	5	6
Equine nutrition	1	2	3	4	5	6
Leatherwork/saddlery	1	2	3	4	5	6
Medical/veterinary	1	2	3	4	5	6
Horse judging	1	2	3	4	5	6
Horsemanship principles/ skills	1	2	3	4	5	6
Public speaking	1	2	3	4	5	6
RIDING DISCIPLINES						
English	1	2	3	4	5	6
Ranch	1	2	3	4	5	6
Speed	1	2	3	4	5	6
Western	1	2	3	4	5	6
Show guidelines/regulations	1	2	3	4	5	6
Show operations	1	2	3	4	5	6
Training techniques	1	2	3	4	5	6
OTHER, fill in below: (optional)						
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6
	1	2	3	4	5	6
			<b>21</b>   V o l u r	iteer Lea	der Surv	е у

you have any additional r		e-related 4-H club you are involved with. If om past, present or intent on future pace provided below.
Opportunity for addition	al remarks, open response.	

Demographics			
	designed to provide insigh	t on your demographic information	۱.
<b>∖</b> ge			
<b>□</b> <26			
<b>2</b> 6 – 30			
<b>3</b> 31−35			
<b>□</b> 36 – 40 <b>□</b> 41 – 45			
<b>1</b> 46 − 50			
<b>□</b> 51 – 55			
<b>□</b> 56 – 60			
□ >60			
Gender			
□ Male			
<b>□</b> Female			
What district is your horse 4	-H club based?		
□Delta □ O			
□Ozark □Ouachita			
<b>D</b> Ouachita			
How long have you been in	your current position?		
□ <1 year			
<b>□</b> 1 year – 5 years			
□ 6 – 10 years □ > 10 years			
- > 10 years			
How long have you been inv		stry?	
Do not consider myself ir	ivolved		
□ < 5 years			
<b>□</b> 5 – 10 years <b>□</b> 11 – 20 years			
☐ Since childhood			
	1 1 21 4 112		
How long have you been inv □ < 1 year	oivea with 4-H?		
□ 1 – 5 years			
□ 6 – 10 years			
<b>□</b> 11 – 15 years			
<b>□</b> > 15 years			
What motivates you to cont	inue being involved with 4	-н?	

Article 3: Appendix H.

Thank You Card

# THANK YOU



The feedback and guidance we have received from those who have completed the 2017 Extension Staff and Volunteer Leader Survey is invaluable; we express our gratitude and appreciation for your contribution to this project.

If you are still working to complete your survey, we will continue accepting responses for the next few weeks and look forward to receiving yours soon.

Sincerely,

Fawn Kurtzo

Graduate Student
Dale Bumpers College of Agriculture,
Food and Life Sciences

Mark Russell Assistant Professor and Equine Specialist

University of Arkansas

Jard Murrell

Division of Agriculture

Article 3: Appendix I.

Replacement Survey Notice

Dear \${m://FirstName},

Our records indicate you have not completed the Arkansas horse 4-H survey. Your opinions and insight are still highly valued and can be used to help mold future efforts in our state horse 4-H program. A replacement survey link is included below, this is the same survey you were provided initially and with the electronic thank you.

Please do not hesitate to contact me if you have any questions, concerns or difficulties regarding the survey.

## Follow this link to the Survey:

\$\{1://SurveyLink?d=Take the survey\}

Or copy and paste the URL below into your internet browser: \$\{1://SurveyURL\}

Sincerely,

Fawn Kurtzo

Graduate Assistant, Bumpers College Dean's Office University of Arkansas Department of Agricultural Education, Communications and Technology

230 Agriculture Building cell: 870-754-9092 fkurtzo@uark.edu

Article 3: Appendix J.

Mailed Survey Replacement Cover Letter



# Department of Agricultural Education, Communications and Technology



205 Agriculture Building, 1 University of Arkansas, Fayetteville, AR 72701-1201 479-575-2035 • Fax: 479-575-2601 • http://aect.uark.edu

Dear [Name],

Our records indicate you have not completed the Arkansas horse 4-H survey. Your opinions and insight are still highly valued and can be used to help mold future efforts in our state horse 4-H program. A replacement survey is included in the packet, this is the same survey you initially received.

Please do not hesitate to contact Fawn by text, call or email if you have any questions, concerns or difficulties regarding the survey.

Sincerely,

Fawn Kurtzo

**Graduate Student** 

Dale Bumpers College of Agriculture, Food and

Life Sciences

University of Arkansas

(XXX) XXX-XXXX

fkurtzo@uark.edu

Mark Russell

Assistant Professor and Equine Specialist

University of Arkansas - Division of Agriculture

(XXX) XXX-XXXX

mrrussell@uaex.edu

Mark Phursell

Article 3: Appendix K.

Final Reminder Attempt Telephone Script

## **Final Attempt Reminder Telephone Script**

### **Extension Administrative Staff:**

Hi, I am Fawn Kurtzo a graduate student at the University of Arkansas in Fayetteville. I am leading a research project about the horse 4-H program and have been in contact with Mr./Ms. (Name). Is he/she available this morning?

Yes: move to CA script

No: May I leave them a message? Move to CA Message script.

# **County Agent:**

Hi (name) this is Fawn Kurtzo, I am a graduate student at the U of A in Fayetteville. I am leading the study about the horse 4-H program and am calling to see if you are still interested in completing the Extension staff and volunteer leader survey.

Yes – ask if they have the link of if they'd like me to resend it to them

No – thank you for their time and consideration

# **County Agent Message Only:**

Hi (Name) I am Fawn Kurtzo, I am working with Dr. Mark Russell and the University of Arkansas to conduct the horse 4-H program study to fulfill my thesis. You volunteered to participate in a survey designed for Extension staff and volunteer leaders around Thanksgiving, and you may have seen emails with survey links over the past few weeks. I am calling today to see if you are still interested in participating. This is my final reminder, the survey will be closed on Valentines day so we can begin the data analysis portion of the project. Thank you for your time and consideration. As always, you can reach me via telephone at XXX XXX XXXX or my email address fkurtzo@uark.edu with any questions or comments. Have a great day.

## **Volunteer Leader:**

Hi (Name) I am Fawn Kurtzo, I am working with Dr. Mark Russell and the University of Arkansas to conduct the horse 4-H program study to fulfill my thesis. You volunteered to participate in a survey designed for Extension staff and volunteer leaders around Thanksgiving, and you may have seen emails with survey links over the past few weeks. I am calling today to see if you are still interested in participating. This is my final reminder, the survey will be closed on Valentines day so we can begin the data analysis portion of the project. Thank you for your time and consideration. As always, you can reach me via telephone at (XXX) XXX-XXXX or my email address fkurtzo@uark.edu with any questions or comments. Have a great day.

Chapter 6

Conclusion

#### Article 1

First, the Arkansas horse 4-H camps were designed to fulfill the specific needs of youth retention and skill based competencies. The pre- and post-test evaluation results and field observation found the 2016 summer camp reached camp goals to prolong interest in horse projects and increase participants' knowledge of horsemanship and safety. The multi-phase evaluation tactic was tailored to answer the questions of program managers (Borden, Perkins, & Hawkey, 2014). Both the camp programs and the evaluation were innovative ideas created and provided by Extension affiliates of Arkansas, with aim to improve the Arkansas horse 4-H program. Older campers and campers with intermediate or beginner level riding skills generally completed the camp feeling less confident about executing equitation patterns. Therefore, suggestions for improved practice include tailoring educational experiences to match the individual needs of campers with less emphasis on group-style lessons (Harder, Lamm, Lamm, Rose, & Rask, 2005). The primary researcher also suggests fostering a deeper understanding of horsemanship by educating camp participants about the anatomical capacity of their horses to execute riding maneuvers with more emphasis on personalized steps to mastery.

## Article 2

Secondly, purposive interviews with county Extension agents, volunteer leaders and parents associated with Arkansas horse 4-H clubs provided a ground level perspective of program implementation and communication aptness. The Implementation Issues Framework (IIF) and Berlo's Source-Message-Channel-Receiver Communications Model provided guidance for interview protocols, conclusions and recommendations (Abell, Cummings, Duke, & Marshall, 2015; Berlo, 1960). Emergent themes of interview transcripts described positive and negative factors club members, program staff, organizational climate, and communities present

during club facilitation as well as communication patterns. Interviewees represented six counties of Arkansas including highly motivated (growing, competitive) and poorly motivated (stagnant, non-competitive) horse project 4-H clubs.

Overall, participants have the potential to impact program implementation through their level of involvement, financial capabilities, and capacity to manage a horse project. Program staff have the potential to impact implementation through their level of experience in 4-H and the equine industry, availability, and level of support. Communities have the potential to impact program implementation due to geographic location, and availability of local resources such as a riding facility. Program outcomes recycle through program implementation and provide a source of motivation for program staff.

According to a statewide assessment in 2001, fundraising was not a required Extension staff competency according to active county agents and supervisors in Arkansas (Cooper & Graham, 2001). Therefore, fundraising resource needs may exist among program staff associated with clubs of members with financial limitations. Findings and suggest the need to explore barriers to fundraising through additional research.

Great diversity in personal backgrounds and professional experiences of county agents and volunteer leaders associated with Arkansas' horse clubs. Few interviewees discussed volunteer leader management practices beyond acting as a source of information or administrative support. Hahn (1979, as cited in Seevers & Graham, 2012) found volunteer management a vital competency of all Extension staff. Therefore, findings suggest volunteer administrators should be encouraged to seek greater support from volunteer leader management models (ISOTURE, L-O-O-P, G.E.M.S., etc.) to more adequately support leaders' needs and interests, and ultimately, improve program outcomes (Seevers & Graham, 2012).

Communicating information about club opportunities occurs through many channels to reach many audiences. Additional research through a statewide assessment of communication practices and preferences should use staffs' perceptions to identify the most effective internal and external communication strategies with respect to cost, timeliness and convenience (Weigel, 1994). Weigel (1994) found including staffs' perceptions and input to evolve communication practices improved morale and adoption rates.

Findings suggest the need to evaluate the Arkansas horse 4-H program at a statewide level to assess impacts of identified factors throughout diverse socio-economic and geographic areas of the state. Results of a statewide study may pinpoint areas of greatest strength and weakness in program implementation, and develop an affirmative action plan to improve practice and outcomes (West, Drake, & Londo, 2009).

Researchers found the IIF an effective tool to explore social factors associated with stakeholders of the Arkansas horse 4-H program. Moreover, research findings generated informed decisions for program improvement and replication throughout diverse audiences and geographic locations as suggested by IIF creators (Abell et al., 2015). Interview results aided development of an assessment tool in the form of a survey provided to the population of Arkansas' horse-related 4-H clubs' program staff.

### Article 3

Finally, surveys made available to Extension staff and volunteer leaders of horse-related 4-H clubs (horse clubs) throughout Arkansas were designed based on the purposive interviews of stakeholders (n = 14). The study identified horse clubs in 35 counties of Arkansas and received responses from Extension staff or volunteer leaders from all three districts of the state (Ozark, 40.4%, Ouachita, 29.8% and Delta, 29.8%). The purpose of this study was to expand findings of

the purposive interviews to identify positive and negative factors influencing program facilitation throughout the state by describing club characteristics, program staff characteristics and program outcomes.

Extension staff and volunteer leaders of horse clubs in Arkansas described a variety of factors associated with club participants through club challenges, club needs and club assets. Over half of clubs (69.8%) reported inactive members, primarily due to losing interest or high involvement with other extracurricular activities. Therefore, over half of clubs are not adequately meeting the needs of club participants; meanwhile, 65% of survey participants reported the need for more club members. Club participants' experiences are commonly limited by over commitment in extra-curricular activities, unengaged parents, financial constraints, and the lack of owning a horse. Few clubs also reported youth who are unwilling to respect others' riding interests are a source of conflict or unsupportive atmospheres. On the other hand, Extension staff and volunteer leaders commonly reported youth have adequate access to proper tack, training aides and safe horses. Moreover, 85% of survey participants agreed or strongly agreed youth are interested in horses.

In addition to describing factors associated with club members, survey participants self-reported challenges, needs, levels of support, horse-related interests, and horse-related competencies. Diversity exists among program staffs' age, years of experience in the position and years of experience in the horse industry. Program staff commonly reported involvement with 4-H and the horse industry since childhood, 39.6% and 66.7%, respectively. However, some participants did not consider themselves involved with the horse industry (16.7%). Diversity was also identified among Extension staffs' 4-H appointments, which ranged from zero to 100%. Most program staff identified as male (85.4%), and described having mediocre experience with

their horse club. Levels of stakeholder support, volunteer leader competence, and club membership/participation affected program staffs' experiences.

The level of club investment among program staff is most commonly affected by time constraints. Program staff also reported volunteer leaders need a wide variety of information, supplies, funding, and educational resources to be effective. Nearly half of Extension staff (48%) reported financial limitations. On the other hand, most Extension staff are experts in 4-H (87.5%), are comfortable working with people in the equine industry (80%), and have healthy relationships with volunteer leaders (75%). Volunteer are commonly supported by each other (80%) and Extension staff (60%). Volunteer leaders described Extension staff provide diverse areas and levels of administrative and informational support during program facilitation. Few volunteers (25%) reported their Extension staff do not provide support with club activities or funding. At the organizational level, program staff commonly reported those in leadership positions for long periods are willing to address the current needs of the program. However, two survey participants did not feel supported by state level staff.

Program staff reported a wide breadth of horse-related competencies with the greatest strengths in public speaking, the speed riding discipline and show operations. On the other hand, less than half of participants reported competence in the English riding discipline (23%), and leatherwork/saddlery (29%). Program staff expressed interest in a wide breadth of horse-related information; however, very few often or always seek information about the English riding discipline (20%). Therefore, most program staff are commonly willing to seek information to gain competency in many horse-related areas with the exception of the English riding discipline.

Negative impacts such as expense and travel are often associated with competitions, camps, training, and experiences only available beyond the local community. Nearly half of

participants (48%) did not perceive liability issues to restrict the ability to host events. Therefore, the availability of community resources such as safe, convenient riding facilities impact clubs' ability to engage and educate participants. Most communities have a wealth of horse knowledge (57%) and community members are often willing to volunteer and educate participants (45%). The majority of program staff (70%) agreed awareness of local resources (e.g. facilities, experts, etc.) influences the success of volunteer leaders. Some clubs do not have multiple fundraising opportunities in their community (31%).

All clubs provide youth with positive program outcomes; however, some do not provide youth with equine opportunities and professionals (6%). Positive youth program outcomes often provide a source of motivation for program staff to continue involvement with horse clubs. Most clubs provide communities with positive impacts; however, few communities do not develop a sense of pride (6%) or youth volunteerism (6%) from their horse club.

Recommendations for the Arkansas horse 4-H program include placing specific importance on youth recruitment and retention efforts. Previous research recommends building stronger social bonds with new and seasoned 4-H members to improve retention (Hamilton, Northern and Neff, 2014). According to Hamilton, Northern, and Neff (2012), the Arkansas horse 4-H program can decrease new member dropout by incorporating a mentorship system pairing new members and families with experienced members and families. The study also recommended improving the retention of seasoned members by providing opportunities for leadership, participation in events, and outlining annual 4-H goals that match their personal interests (Hamilton, Northern and Neff, 2014).

Encouraging parental engagement, involvement or support of club members may also improve club member investment and retention (Scott, Clark, & Raegan, 1990). Measuring and

reporting youth outcomes is a reoccurring source of motivation for parents (Hedrick, Homan, & Dick, 2009; McKee, Talbert, Barkman, 2002). Forest (1976), encouraged program staff to remember the "natural" importance of informal evaluation practices (p. 28). For clubs this could mean reporting activities, awards, and members' personal growth to highlight the positive impact of horse clubs to local stakeholders. Therefore, clubs should be encouraged to conduct annual strategy meetings to set and measure goals at the group and individual level.

In addition, conducting strategy meetings at a bi-quarterly or annual basis may help clubs set fundraising goals, identify opportunities to make a presence at community events, and develop a database of local resources. Although the desire for a database of local resources was expressed as a need of volunteer leaders, both leaders and Extension staff most frequently reported time constraints as their greatest challenge. Therefore, suggestions for improvement include hosting a strategy meeting including club members, parents, leaders and the associated county staff. Strategic meetings may provide the opportunity to brainstorm local opportunities of the following: riding areas, horse owners that might share a project horse, potential guest speakers, and other solutions to club-specific needs. Committees could be assigned and action plans created to delegate duties to willing club members, parents or volunteers beyond club leaders and Extension staff.

Program staffs' experience in their position ranged from less than five years to greater than 10 years. This difference implies the opportunity to develop mentorships to better support those new to the position and foster innovative program strategies (Forstadt & Fortune, 2016). A recent study among Extension staff in Maine recommended cultivating social connections at the individual, program, and community levels to overcome the isolation of specialized program staff (Forstadt & Fortune, 2016). A practice that can also improve personal and organizational

sustainability in Extension programs (Forstadt & Fortune, 2016). Few program staff reported levels of competence or interest in the English riding discipline. This implies youth may not have learning opportunities about English at their local level; therefore, guest speakers, camp and clinic opportunities may provide the greatest access to this information. Seevers and Stair (2015), found many positive aspects of incorporating community partnerships to improve programs. Another suggestion includes developing and sharing a statewide list of active equine organizations to connect local enthusiasts with similar interests and foster sharing information, opportunities and resources.

Recommendations for future research include increasing the accuracy of participant identification by documenting Arkansas' horse clubs and associated stakeholders on an annual basis. Survey instruments were developed from stakeholders' responses in purposive interviews, and did not adequately cover constructs associated with volunteer leader management detailed in models such as ISOTURE, L-O-O-P, G.E.M.S., etc. (Seevers & Graham, 2012). Researchers recommend incorporating elements of volunteer leader management models to survey instruments for further insight. Findings of this study are limited to descriptive methods, additional efforts to identify relationships among variables will highlight areas of greatest positive and negative impact among audience demographics, geographic locations and construct items. Researchers identified many factors associated with program implementation through the social lens of the IIF (Abell, et al., 2015). An increasing number of programs in the Extension field are challenged to provide accountability and meet the diverse needs of stakeholders; therefore, researchers encourage using holistic frameworks such as the IIF to tailor research objectives to current needs and develop multi-dimensional findings.

## **Concluding Remarks**

In conclusion, Arkansas horse 4-H program stakeholders at the club member, parent, volunteer leader, program assistant, county agent, and staff chair levels provided many perspectives of the overall program. The combined findings of the (a) 2016 horse 4-H summer camp evaluation, (b) purposive interviews with stakeholders, and (c) statewide survey provided a foundation to secure program sustainability and increase stakeholder support. Moreover, taking action based on stakeholders' perspectives improves stakeholders' pride and loyalty in programs (Culp, Edwards, & Jordan, 2015).

Meeting the needs of program participants is an important practice of the Cooperative Extension Service (Seevers & Graham, 2012). According to research findings, the Arkansas horse 4-H program provides youth with life skills and communities with educational experiences, investments, and adults with leadership capabilities. The positive outcomes identified by stakeholders support the validity of the Arkansas horse 4-H program, according to current industry focus (Graham, Arnold, & Jayaratne, 2016). Therefore, program administrators should take pride in program strengths and outcomes to leverage resources for future program improvements (Hedrick, et al., 2009; Homan, et al., 2007; Merten, et al., 2014; West, et al., 2009).

Although the state of Arkansas includes diverse geographic and social landscapes, the majority of the state hosts youth with equine interests, as illustrated in Figure 1. "Independent" counties have 4-H members with horse projects or participate in horse-related activities without the presence of a club. "Community club" counties have multi-project clubs with an equine component, and "horse club" counties have single project clubs focusing on horses. According to Extension staff, at least 65% of Arkansas' counties host 4-H members with equine interests.

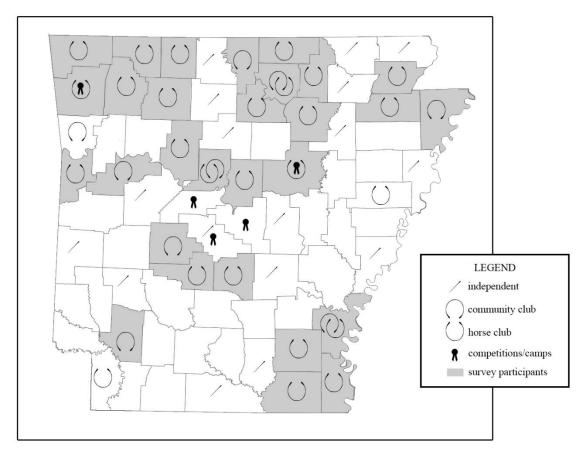


Figure 1. Reported levels of 4-H members' equine interest according to county Extension staff.

Participants of the 2016 horse 4-H summer camp commonly reported improvement in horsemanship, increased safety knowledge, and projected long-term interest in horse projects. Extension staff and volunteer leaders throughout the state reported low levels of competency in ranch riding, but high levels of interest in this topic. Therefore, the program additions of horse camps and the ranch riding discipline have been successful efforts. Recommendations included continuing to meet the diverse needs of stakeholders through innovative efforts to maintain the viability of the horse 4-H program (Seevers & Graham, 2012; West, et al., 2009).

Identifying program outcomes is a tool for the Arkansas horse 4-H program to recognize program strengths, monitor program accountability, and increase stakeholder support. However,

the primary purpose of evaluation efforts include providing recommendations for improvements based on identified impacts (Wholey, et al., 2010). The variable nature of Arkansas' horse 4-H program stakeholders resulted in a wide variety of program needs. However, as implied by IIF, strategically reducing the negative impacts associated with youth and program staff will also improve additional negative factors associated with program implementation (Abell, et al., 2015). Therefore, overall suggestions for improvement focus on the most common factors negatively affecting the experiences of youth and program staff.

First, rising youth dropout rates are a universal concern for 4-H programs and require strategic, tailored efforts to overcome (Harder, et al., 2005; Hedrick, et al., 2009; Homan, et al., 2007). Stakeholders described the lack of prioritizing club activities, unengaged parents, financial constraints, availability of local resources, exposure to professionals, and level of community involvement all influence youths' experience with the horse program. Stakeholders repeatedly discussed the expense and time associated with traveling to educational and competitive opportunities sometimes hours from home, as illustrated in Figure 1. Therefore, encouraging program facilitators to pique the interest of club members with tailored, local opportunities will result in higher levels of participation and program outcomes. Reporting positive outcomes to parents and communities improves support (Hedrick, et al., 2009; Homan, et al., 2007).

Increasing the number of quality, local opportunities for youth is a complex issue as time constraints are the greatest challenge of program staff. However, stakeholders often described having healthy relationships and horse-related competencies with a wealth of horse knowledge available in communities. These strengths set the stage for collaboration and delegation.

Suggestions included annual or bi-annual strategy meetings at the club level attended by program

staff, parents, club members, and local experts to outline club members' current interests and determine the potential local resources needed. Senior club members can be utilized to lead a youth committee to reach out to resources and determine accessibility. For example, resources may include private riding facilities, local equine experts, active equine organizations, local equine-related businesses, and clubs of neighboring counties. This suggestion supports the recommendation of Hamilton, Northern, and Neff (2012) to place older youth in active leadership roles to improve retention. Another option includes "mobilizing" volunteer leaders of neighboring counties to share interests, resources, and opportunities in a collaborative nature (Culp, 2013).

Finally, levels of volunteer leader management ranged broadly throughout the state. Some counties have full-time 4-H Extension staff, while others are limited to staff with multiple appointments and limited 4-H experience. Research findings noted volunteer leaders do not receive the same level of support throughout the state. Most Extension staff primarily provided volunteer leaders with information and administrative support, such as relaying deadlines and providing member enrollment information. There are multiple volunteer leader management models that emphasize the importance of educating, monitoring, and recognizing volunteer leaders to develop sustainable programs (Seevers & Graham, 2012). In addition, limited involvement with volunteer leaders enhances the risk of generating diverse impacts on youth participants (National 4-H Council, 2016b; Radhakrishna & Ewing, 2011). Suggestions for improvement include (a) assessing volunteer leader management competencies and (b) volunteer leader management practices of Extension staff to determine areas of strength and weakness. Findings of this research project identified needs of volunteer leaders; however, did not fully explore the capacity or effort Extension staff provided in alleviating those needs.

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