

**AN EXPLORATORY STUDY OF ADULT INTERACTIONS AMONG
YOUTH LIVESTOCK EXHIBITORS**

by

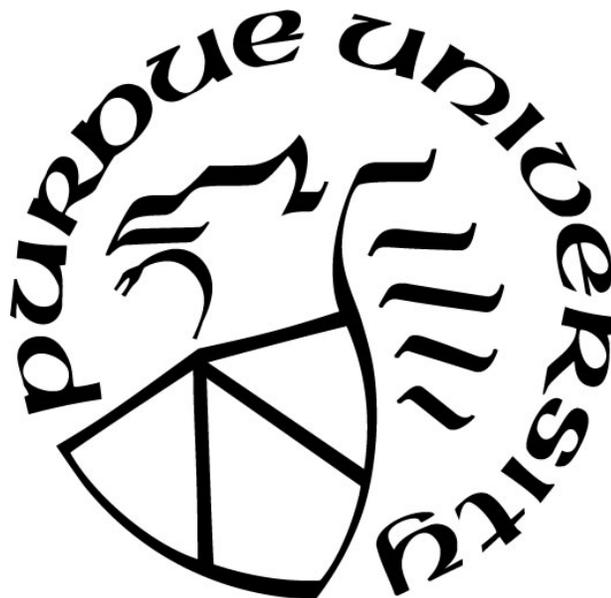
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A Thesis

Submitted to the Faculty of Purdue University

In Partial Fulfillment of the Requirements for the degree of

Master of Science



Department of Youth Development and Agricultural Education

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I would like to dedicate this work to my loving husband and family. Without their love, support and encouragement I would not be the person that I am today. Thank you for always pushing me to do my best and instilling in me a passion for agriculture and youth development.

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ABSTRACT

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Livestock projects enable youth to build valuable life skills while growing their knowledge in a livestock animal species by competing against other livestock exhibitors. Traditionally, livestock projects are meant to provide youth exhibitors with learning experiences through its competitive nature and through the cooperation with adults. The adults that youth work with in a livestock project could be a parent, show jock, or 4-H volunteer. While youth-adult interactions in a livestock project are intended to provide positive exhibition experiences for youth, youth-adult interactions can also shape the way youth view competition in their livestock project, and impact the skills that are learned or developed.

The purpose of this study was to describe and explain factors that predict youth livestock exhibitors' perceptions of life skill development informed by their livestock exhibition experiences, youth-adult interactions regarding livestock knowledge, views of competition, and livestock exhibition motives. The population for this study were junior high and high school students ($N=159$) that were enrolled in an agricultural education course and that also exhibited a beef, sheep, swine, or goat project. Quantitative data was collected using the Youth Livestock Exhibition Experiences Survey which included items related to participants' livestock exhibition experiences, sources of livestock knowledge, views of competition, livestock exhibition motives and life skills. Descriptive statistics

including means, standard deviations, frequencies, percentages and medians were used to analyze the data. A discriminant analysis was also used to predict youth's livestock exhibition motives.

There were five conclusions for this study. First, youth livestock exhibitors in this study reported their parent was their main source of livestock knowledge and skills in their livestock project. Second, youth perceived adults modeled highly positive behaviors when working with youth in a livestock project. Third, participants agreed that competition was a driving force behind their motivation to strive for excellence in their livestock project and viewed competition in livestock exhibition to be a positive event. Fourth, youth livestock exhibitors in this study agreed they gained life skills through their engagement in a livestock project. Fifth, youth livestock exhibitors' motives could be predicted and grouped in to competition or learning. These conclusions were discussed at length in the final chapter as well as future directions for research and implications for theory and practice.

CHAPTER 1. INTRODUCTION

1.1 Introduction

Livestock projects enable youth to build valuable life skills while growing their knowledge in a livestock animal species by competing against other livestock exhibitors and building valuable life skills. 4-H members have the opportunity to complete different subject matter projects and events throughout their time and involvement in the organization through participating in competitive activities that promote learning. Projects are worked on throughout the course of a year and, often times, youth will exhibit and display their projects at the county fair in order to show the community what they have learned and to show off their hard work (Purdue University Extension, 2015).

In programs such as 4-H, adult volunteers are heavily relied on to extend delivery methods to members of the community in cases where the Extension Educator or Agricultural Educator cannot (Steele, 1994). Adults may include parents, business professionals or other adults who are active throughout the community and provide support and advice for youth within a project area. The Indiana 4-H Youth Development Program relies heavily on youth-adult interactions, as those interactions help in the development of youth across the state in order to provide positive youth development experiences (Purdue University Extension, 2015). Moreover, in the subject area of livestock exhibition, parents are given the opportunity to be a teacher, model, and example for their child to observe and try to develop positive traits (Davis, 1998). The youth-adult interaction in a livestock project shapes and provides a well-rounded experience for livestock exhibitors.

1.1.1 Livestock Projects

4-H members have the opportunity to learn more about a subject matter through completing learn-by-doing activities, also known as 4-H projects. Adult volunteers and Extension staff who are knowledgeable in a subject area often provide assistance in these projects to allow the youth to learn the appropriate knowledge and skills a project entails (Purdue University Extension, 2015). The projects that youth participate in are meant to be worked on for several months and are generally exhibited at the county fair, and in some cases the state fair, where the projects are awarded through competitive activities. A 4-H member can sign up for an unlimited amount of competitive 4-H projects in the areas of animal science, communication and expressive arts, engineering and technological science, healthy living, leadership & citizenship and plant and environmental science (Purdue University Extension, 2015).

4-H livestock projects fall under the animal science category of 4-H projects and involve all livestock animals such as beef, sheep, swine and goats. The 4-H youth livestock project is the largest animal science project area that enables youth to develop their interest in a particular livestock species. Youth learn about the selection, care and feeding of livestock and animal health throughout the course of a livestock project, as well as record keeping (Virginia Cooperative Extension, 2016). According to Sawyer (1987), obtaining knowledge and skills are the most important aspects of raising an animal. The knowledge acquired and the experience gained have an interconnected relationship when it comes to animal science and related projects (Sawyer, 1987).

1.1.2 Competition in Livestock Projects

According to Porter (2008), competition is one of society's most powerful forces for making things better in the many cases of human endeavor. Competition is very pervasive; it is spread throughout many different social organizations and is profoundly enduring as part of every individual's life. Not only is competition a part of economic systems, education and aspects of the business sector, it also consumes a majority of an individual's leisure time. Even in cases where there has been no explicit contest set up, people tend to interpret the world in competitive terms (Kohn, 1992). According to Midura and Glover (1999), competition is the technique of comparing skills and abilities. Competition ignites creativity and motivates youth to set goals, complete tasks and strive for excellence (4-H Leader, 1987).

One of the most important goals of the 4-H Youth Development Program is to provide educational experiences through competitive events and competitive livestock shows are one of the organization's biggest competitive endeavors (Keith & Vaughn, 1998; Davis, 1998). A major component of the 4-H program is the livestock project. Livestock exhibition is a competitive, but educational activity that satisfies the mission of Cooperative Extension by teaching youth the responsibility of caring, feeding, managing and showing through exhibiting livestock (Baker, 1991; Kieth, 1997). Youth take their livestock to county fairs and exposition shows each year to exhibit their hard work that they put into their animal. Livestock projects are a long-term project and provide a great deal of coordination with adults such as county Extension agents, expert livestock exhibitors (show jocks), 4-H volunteers, parents and youth (Boleman, 2003). However, the roles of these adults differ within a livestock project. For example, the Extension

agent and 4-H volunteer provide information to livestock exhibitors on project rules and livestock show guidelines, whereas the parent and expert livestock exhibitor provide youth with animal stewardship and exhibition knowledge. Researchers have found that participating in competitive livestock shows benefit young people as they contribute to their life skill development in areas such as responsibility, decision-making, communication and public speaking (Boleman, 2003; Ward, 1996).

However, the topic of competition in relation to livestock shows and its benefits and drawbacks can raise many pressing questions. Some argue that competition in this venue can decrease self-efficacy, foster individualism, cause cheating and unfair practices and cultivate improper parental attitudes (Daniels, Perkins, & Stern, 2003). Youth that participate in competitive livestock projects will create differences in the goals they set, and for some, their successes and failures result from the competitive reward they receive. On the other hand, the reward can increase participation and motivation to succeed.

1.1.3 Learning in Livestock Projects

Livestock projects engage youth in hands-on activities to get them excited about their project and allows the exhibitor to set goals in order to further their knowledge and success of their livestock animal (4-H, 2015). Educating 4-H members, or more specifically, youth livestock exhibitors, can come through rewards and incentives through participation in competitive activities (Davis, 1998). According to Davis (1998), livestock shows are special, not everyone is a winner and someone has to get last place. Different levels of success provide youth with opportunities to learn and improve their project for next year's competition.

The National 4-H Curriculum provides exhibitors with activities to learn about their project at different age levels. These experiential learning activities allow exhibitors to learn project skills such as animal health, animal care, animal grooming and animal selection (4-H, 2015). Livestock projects also give exhibitors the opportunity to participate in all aspects of livestock production alongside adult mentors (Gamon, Laird, & Roe, 1992). According to Gamon et al., parents are the major source of livestock project skills and information when it comes to learning about a livestock species. Younger livestock exhibitors, however, seem to learn more effectively through the 4-H curriculum activities (Gamon et al., 1992).

1.1.4 Youth-Adult Interactions

Youth-adult interactions act as a critical feature to the development, psychology and engagement of youth (Zeldin, Christens, & Powers, 2013). The 4-H Youth Development Program has historically aimed for an environment of empowerment for youth. The organization is formally structured for youth and adults to share power in an effort to foster development of leadership and life skills for the youth (Anderson & Sandmann, 2009; 4-H, 2015). Though the 4-H Organization is a youth serving organization that invests in the lives of youth, one critical aspect of that empowerment of development is the role of adults in the program (Anderson & Sandmann, 2009). Competitions, workshops and other related activities engage youth in interactions with Extension Educators and 4-H volunteers, however, the interactions with adults from outside the program can be the most significant for youth (Jarrett, Sullivan, & Watkins, 2005). Through participation in livestock projects, youth have the opportunity to interact with parents, feed specialists, expert livestock exhibitors (show jocks), and other

agriculture business professionals to foster the development of knowledge and beliefs about their project. However, in interactions with adults, the adults can over power the youth. Adults often possess authority over youth causing the youth to feel nervous and uncomfortable (Jarrett et al., 2005). Therefore, in order for youth-adult interactions to be successful, the youths' and adults' role needs to be equal and more focused on the development and goal achievement of the youth (Camino, 2000).

Safrit and Auck (2003) studied youth 4-H participants and their interaction with adults and community service. They found that 64% of the respondents participated in service and worked with adult partners through their involvement in the 4-H program. Of that group, animal sciences was the most common subject area of 4-H where youth interacted and participated in learning activities with adults. According to Safrit (2002), youth empowerment is a challenging concept for many adults and effectively empowering youth requires an organizational environment that values the contributions of youth and adults personal commitment to bring that environment to life.

1.1.5 Life Skill Development

The 4-H Organization empowers young people with the skills needed to be successful over a lifetime (4-H, 2015). The development of these "skills" comes through experiential learning, which can be seen as a foundation for the 4-H Organization (Boyd, Herring, & Briers, 1992). According to the "Targeting Life Skills Model," life skills are abilities that youth can learn in order to live a successful, satisfying and productive life (Hendricks, 1996). Developing life skills allows individuals to work more effectively and efficiently and allows youth to better understand their environment and values in

order to make better decisions and communicate with their peers (Boyd et al., 1992; Groves & Groves, 1980). According to Boleman, Cummings, and Briers (2004), the longer youth are engaged and experienced in a project, the more likely they are to develop the life skills needed to be a productive and successful adult.

Life skills can be developed through animal science projects (Gamon et al., 1992). Researchers have identified the following life skills developed by participating in 4-H livestock projects: responsibility, setting goals, self-discipline, self-motivation, record keeping, public speaking, and communicating (Boleman et al., 2004; Boyd et al., 1992; Rusk, Summerlot-Early, Machtmes, Talbert, & Balschweid, 2003; Ward, 1996). Boleman et al. (2004) also revealed that parents observe the life skills that their children gain from participating in livestock projects. Additional life skills parents have observed are: knowledge of the livestock industry, positive self-esteem and the ability to work in teams. Sawyer (1987) also found that youth livestock exhibitors showed an advancement in the development of life skills the more years they were involved in the project.

1.2 Statement of the Problem

A major goal of the 4-H program is to develop citizenship, leadership and responsibility through experiential learning projects and activities (4-H, 2015). The use of competition as an educational tool and the effects of competition on youth through 4-H experiential learning projects and activities can have both positive and negative effects on the livestock exhibitor. There are differing views on the value of competition and competition as a motivator and influencer for the overall youth experience (Homan, 2006). However, there is little understanding on the role adult mentors play as it pertains to competition and knowledge outcomes for youth regarding competitive livestock

projects. Moreover, there is limited research related to the perception of the youth regarding their competitive livestock exhibition experiences as learning experiences. Livestock projects in Indiana are popular and highly competitive both at the county and state level (Purdue University Extension, 2015). An adult mentor's role in the youth livestock project will likely have a major influence on the youth experience. A 'winning at all costs' attitude or a heavy emphasis placed on competition within the youth-adult relationship could create an unhealthy learning environment for youth involved in livestock projects (Kieth, 1997). Subsequently, this attitude could result in positive youth development organizations not being able to fulfill the mission of promoting positive youth development and youth mentoring through experiential learning.

1.3 Significance of the Study

This study is significant for four primary reasons: 1) this study could enhance the effectiveness of volunteers and adult mentors involved in youth livestock projects, 2) this study may lead to the enhancement of professional development practices for Extension educators and volunteers, 3) this study may inform adults and volunteers of youth motivation's for participating in livestock projects, and 4) this study could enrich parent's awareness of youth livestock exhibitor experiences and outcomes.

First, this study could enhance the effectiveness of volunteers and adult mentors involved in youth livestock projects. The 4-H Organization has a network of over 500,000 volunteers that provide positive mentoring to 4-H youth and more specifically, 4-H livestock projects rely heavily on youth-adult interactions to reciprocate values, skills and knowledge to 4-H youth (4-H, 2015). The knowledge gained from this study could provide adult mentors and volunteers insights into the different livestock skill areas that

need to be focused on and discussed with youth, thus leading to higher quality positive youth development practices and youth-adult interactions. This study will challenge volunteers and adult mentors to reflect upon their current beliefs and values that influence youth livestock exhibitors.

Second, the knowledge gained from this study may provide practical information that extension educators and volunteers can use which could lead to the enhancement of professional development practices. This study could also provide useful data and insight for future volunteer training practices. As suggested by Boyd (2004), Extension professionals often lack the competencies to utilize the tremendous resource which is the volunteer. The knowledge gained from this study could play a major role in informing extension educators and volunteers about effective livestock project practices and skills. Similarly, the knowledge gained from this study could also serve as a guide to a variety of advanced livestock project competencies in order for Extension educators and volunteers to improve their professional effectiveness.

Third, this study will likely inform adults and volunteers of youth's motivation for participating in a livestock project. Specifically, this study will highlight the motives and driving forces for youth participating in a livestock project by determining if learning or competition is the biggest motivator for exhibiting livestock. Adults and volunteers work closely with youth in livestock projects, therefore, it is important for those individuals to fully understand why youth exhibitors want to show livestock. By exploring the body of knowledge of competition and learning as it pertains to livestock projects, adults and volunteers may better understand the reasons their child or other youth participate in livestock exhibition projects, thus allowing adults and volunteers to improve their

mentoring practices. The information gained from this study could also be of assistance to adults to help inform how their interactions and relationships should meet the needs of the youth they work with.

Fourth, this study may enrich parent's awareness of the experiences and outcomes youth gain in livestock exhibition. Parents and their children are highly connected and work together often in livestock projects. This study could help parents understand what youth view as important when it comes to livestock exhibition and the sources of where youth gain their knowledge and livestock skills in their project. Parents should be made aware of the competencies and life skills of youth because this awareness could lead to higher quality youth-adult interactions and a greater return on investment for youth exhibitors. The knowledge gained from this research could also help parents assist in their youth's livestock project to enhance the positive life skill outcomes for their son or daughter.

1.4 Purpose of the Study

The purpose of this study was to describe and explain factors that predict youth livestock exhibitors' perceptions of life skill development informed by their livestock exhibition experiences, youth-adult interactions regarding livestock knowledge, views of competition, and livestock exhibition motives.

1.5 Research Questions

1. What were youth exhibitors' livestock exhibition experiences (i.e., number of years participating with different species, number of species shown, level of success, type of livestock shown, number of shows, level of shows)?

2. Which adults (i.e., parent/guardian, show jock, 4-H volunteer), according to the youths' perceptions, served as sources of livestock knowledge and modeled positive behaviors regarding livestock exhibition?
3. What were youth exhibitors' views of competition and perceptions of livestock exhibition motives (i.e., youth perception, youth's perception of parent/guardian)?
4. To what extent did youth perceive the development of life skills through their livestock project?
5. To what extent was there an agreement of youth's livestock exhibition motives and how they perceived their parent/guardians' motives?
6. To what extent could youth exhibitors' livestock exhibition motives (i.e., competition (aka winning shows) and learning (aka, developing life skills, making money, learning livestock skills) be predicted based on youths' livestock exhibition experiences (i.e., youth-adult interactions, view of competition, the extent adults served as sources of livestock knowledge, youth perceptions of parent/guardians' livestock exhibition motives)?

1.6 Limitations of the Study

This study will be conducted with the following limitations:

1. This was an exploratory, descriptive study. This limited the ability to make casual conclusions (Schutt, 2012).
2. This study was limited to 4-H livestock project exhibitors enrolled in five selected Indiana school-based Agricultural Education Programs. Therefore, the findings may not be generalizable to other school-based programs or 4-H livestock exhibitors.

3. Participants were junior high and high school aged students, therefore, the research may not be generalizable to other grade levels.
4. Self-reporting could be a limitation in this study because the accuracy of these data is dependent upon the honesty and accuracy of the participants' opinions.
5. This research examined 4-H livestock project exhibitors in five of the 92 Indiana counties. There is limited external validity because findings may not be generalizable to other counties in Indiana.
6. The researcher was a past livestock project exhibitor. This bias could impact the interpretation of these findings.
7. Social desirability could be a limitation in this study because participants could give social desirable responses to the survey instrument instead of choosing responses that are reflective of their true feelings (Fisher, 1993).

1.7 Assumptions

The following assumptions were made for this study:

1. A positivist research paradigm was used. Therefore, the researcher assumed that “an external, objective reality exists apart from human perceptions of it” (Schutt, 2012, p. 611).
2. Participants responded to the survey instrument truthfully.
3. Participants who completed the survey instrument did so independently without use of outside help or assistance.
4. Participants who completed the survey instrument were at least 14 years of age.
5. Researcher bias was minimized and the study was conducted objectively.

1.8 Definition of Terms

The following is a list of terms used throughout the study:

4-H Youth Development Program - The largest youth serving program as part of the Cooperative Extension System and land grant universities that offers youth of age's 9-19 non-formal, hands on educational experiences (4-H, 2015).

4-H Member - Youth in grades three through 12 that participate in the 4-H Youth Development Program activities.

4-H Project - A certain subject area of study of the 4-H program that offers youth the opportunity to learn from hands-on experiences (Purdue University Extension, 2015).

4-H Volunteer - Any adult helping youth with a project that has a role within the 4-H Organization.

Competition - A pervasive event, that allows one to compete in different areas of society to make things better in the many fields of human endeavor (Porter, 2008).

Cooperative Extension Service - Non-formal education service providing activities and learning experiences to people and farmers of rural communities, as well as people living in urban areas emphasizing on knowledge gained through the research and education of land grant universities (United States Department of Agriculture, 2016).

County Extension Educator - A professional in the Extension Program with foundations in youth development, adult education, psychology, agricultural sciences, leadership development and family studies (Scheer, Ferrari & Ernest, 2006).

Learning Experience - An interaction, course, program or other experience in which learning and obtaining knowledge takes place (Kolb, 2014).

Life Skill - Abilities that youth can learn in order to live a successful, satisfying and productive life (Hendricks, 1996).

Livestock Project - A competitive exhibition project that includes beef, sheep, swine and goats that offers youth valuable skills for living (Ward, 1996).

Livestock Show - An event where youth exhibit livestock where the animals are judged based on phenotypical characteristics (Kieth, 1997).

Show Jock - An expert who coaches families on how to raise and prepare a livestock animal for show.

Youth-Adult Interaction - An interaction that allows adults to pass on information, values, and goals on to youth, ultimately effecting youth's way of thinking on a specific area of interest (Bronfenbrenner, 1979).

CHAPTER 2. REVIEW OF LITERATURE

2.1 Introduction

This chapter will provide an overview of livestock exhibition and youth livestock exhibition experiences, as well as the role the youth-adult interaction plays as it relates to youth exhibitor's view of competition and livestock knowledge. Additionally, this chapter will review the literature of four primary related topic areas: 1) livestock projects and exhibition, 2) youth livestock exhibition experiences, 3) learning in livestock exhibition, and 4) life skill development through livestock exhibition. The conceptual and theoretical frameworks will also be introduced in this chapter. Finally the need for the study will be addressed followed by a brief summary to conclude the chapter.

2.2 Purpose of the Study

The purpose of this study was to describe and explain factors that predict youth livestock exhibitors' perceptions of life skill development informed by their livestock exhibition experiences, youth-adult interactions regarding livestock knowledge, views of competition, and livestock exhibition motives.

2.3 Research Questions

1. What were youth exhibitors' livestock exhibition experiences (i.e., number of years participating with different species, number of species shown, level of success, type of livestock shown, number of shows, level of shows)?

2. Which adults (i.e., parent/guardian, show jock, 4-H volunteer), according to the youths' perceptions, served as sources of livestock knowledge and modeled positive behaviors regarding livestock exhibition?
3. What were youth exhibitors' views of competition and perceptions of livestock exhibition motives (i.e., youth perception, youth's perception of parent/guardian)?
4. To what extent did youth perceive the development of life skills through their livestock project?
5. To what extent was there an agreement of youth's livestock exhibition motives and how they perceived their parent/guardians' motives?
6. To what extent could youth exhibitors' livestock exhibition motives (i.e., competition (aka winning shows) and learning (aka, developing life skills, making money, learning livestock skills) be predicted based on youths' livestock exhibition experiences (i.e., youth-adult interactions, view of competition, the extent adults served as sources of livestock knowledge, youth perceptions of parent/guardians' livestock exhibition motives)?

2.4 Literature Review Methodology

This study was informed by the literature that was identified using several different search methods. References were found using the Purdue University library direct search, Purdue eJournal database, Google Scholar, *Journal of Agricultural Education* and the *Journal of Extension* online database. Examples of search terms and phrases used in the search for literature included: "4-H livestock projects," "competition in youth development organizations," "competition in 4-H projects," "youth-adult interactions," "learning in 4-H," "life skill development in livestock projects," "livestock

exhibition motivation,” “self-regulation,” “positive youth development theory,” and “ecological systems theory.”

2.5 Livestock Project Exhibition

Youth who participate in 4-H programs have the opportunity to complete many different projects and activities in multiple subject areas. Subject areas include animal science, communication and expressive arts, engineering and technological science, healthy living, leadership & citizenship and plant and environmental science (Purdue University Extension, 2015). The projects that youth participate in are meant to be worked on over time and are generally displayed at the county fair, or sometimes state fair, where the projects are awarded through competitive activities. Parents, volunteer leaders and other adults organize and conduct each specific project and develop “learn-by-doing” activities that each project contains through the National 4-H Curriculum (Ladewig & Thomas, 1987).

4-H livestock projects involve all livestock animals such as beef, sheep, swine and goats. Students raise and care for their animal and also learn about the nutrition and management of that particular animal species, while also developing decision-making skills, self-motivation and life skills. Livestock projects also encourage youth to participate in research and develop relationships with veterinarians, nutritionists and animal researchers allowing them to learn through their own experiences (Purdue Extension Animal Science, 2015; Kieth, 1997; Baker, 1991). The exhibition of livestock projects exposes youth to the animal agriculture industry, motivating youth to pursue a college education in animal science and related careers. Not only do livestock projects encompass the traditional role of the 4-H project, but they also can include both

competitive and non-competitive experiences such as livestock expos, quiz bowls, skill-a-thons or demonstrations put on by the adult volunteer and extension staff (Hoover & TenBroeck, 2001).

2.6 Learning and Livestock Exhibition

Experiential education is an instructional approach based on the idea that ideal learning occurs through experience (Dewey, 1938). John Dewey was a strong advocate for experiential education and stated that experience matters in education and without it, no true learning situation can take place (Dewey, 1938). In order for experiential learning to occur, however, individuals must reflect on their experiences so they become more meaningful. Livestock projects offer an excellent venue for youth to learn not only life skills, but to gain knowledge on a particular livestock species. 4-H livestock projects allow youth the opportunity to participate in all aspects of livestock production and witness abstract thinking skills through science, technology, engineering and math (STEM) in a real world context (Wooten, Rayfield, & Moore, 2013).

The 4-H Organization is a non-formal education program that provides youth with hands-on, learn-by-doing experiences alongside peers and caring adults (4-H, 2015). Through the National 4-H Curriculum and project rules, 4-H members are given the opportunity to participate in many experiential learning activities within many different subject areas, especially livestock projects (Emo, 2008; National 4-H Curriculum, 2016). According to Emo, rules mold youth's experience in a project by guiding his or her actions, as well as molding learning experiences by influencing how youth progress through the project. The National 4-H Curriculum also requires that livestock exhibitors keep records of their animals and complete activities that influence the knowledge gained

from a livestock project. Thus, rules and curriculum ensure educational experiences for youth livestock exhibitors (Emo, 2008).

In a study conducted by Richardson (1994), 4-H members revealed that they learn best through their 4-H projects and different subject areas by actually doing activities or seeing activities being done by a peer or adult and then discussing the activity. Learning processes are further enhanced when youth have the opportunity to talk about what they have done in different activities (Richardson, 1994). In the 4-H organization, 4-H members learn from hands-on activities, but along the way they also learn about themselves.

4-H members enrolled in livestock projects typically learn project skills in the areas of record keeping, health care, nutrition and marketing (Gamon, Laird, & Roe, 1992). According to Sawyer (1987), acquiring animal knowledge is the most important skill in raising an animal. Sawyer also determined that knowledge acquired and experience gained in livestock projects are closely related. A majority of respondents in his study revealed the knowledge they gained from their livestock project was applied to develop a feeding program for their livestock, determine costs per pound for their livestock and how to care for their sick or injured animal. Emo (2008) researched how rules influenced educational experiences of livestock exhibitors. He revealed that rules encouraged youth to think like scientists and rules influenced the quality of the exhibitor's learning experience. For example, weight restrictions for a livestock show allowed exhibitors to monitor their animal's weight and learn how to control an animal's diet. Similarly, Rusk et al., (2003) revealed that 4-H livestock project participants who

exhibit at the state fair have higher levels of project skills than those who exhibit only at the county fair level.

2.7 Competition in Livestock Exhibition

Competition is a deeply ingrained and enduring process that is a part of all American society. A reliance on rewards and enhancing performance is nothing new to the United States as it is prevalent in the country's economy, government and heritage (Vickers, 1990). Competition can come in the form of winning and losing, as well as seeking out to be number one (Kohn, 1992). Not only is competition prevalent in American society, it is spread throughout many different social organizations and as a part of every individual's life, consuming a majority of the amount of an individual's free time (Kohn, 1992).

Competition in youth organizations is a very common motivational and teaching and learning tool (Burguillo, 2010). Competition is in a controlled environment in youth organizations and acts as a tremendous encouragement for youth to succeed. Without question, youth organizations have served American youth well for many years and the competitive aspect of many of these organizations and associations provides opportunities for youth to receive recognition and prepare for a competitive adult world (Debord, 1990).

Livestock project exhibitors acquire sportsmanship abilities in the livestock show ring (Davis, 1998). Livestock shows are distinctive in that it is one exhibitor versus many exhibitors in the competition. Livestock exhibitors must be able to accept when they do not win first place and to be humble when they do. Some exhibitors may place lower

placings than first place, but still feel successful (Davis, 1998). Davis (1998) found that while many exhibitors vie for a first place ribbon, receiving premium money at the end of the show at the auction may also be satisfactory.

Livestock project exhibitors receive many awards, trophies and ribbons for their competitive projects which can be a great incentive and motivation to strive for the best when it comes to learning and acquiring new skills. Kohn (1992), indicated that rewards and incentives work great as motivators in the short run, but fail and cause harm in the long run or in the future. In addition, Weber and McMullers (1986) found that although blue ribbons motivate youth to expand their abilities and reach their goals, the attainment of a reward may also limit creativity and interest. Not all children can be receive awards, which emphasizes the importance of healthy competition and learning experiences in 4-H livestock projects.

Competition is a driving force for much of today's society and the same can be said about 4-H livestock projects. According to Davis (1998), competition in 4-H livestock projects is something that is desired. In his research, he found that 4-H members who participate in livestock projects enjoyed the competitive aspect of the project and believed it to be a great skill and lesson that they can take with them in all aspects of their life. However, competition can cause concerns within livestock projects. Kieth (1997) reported that excessive parental involvement in 4-H livestock competitions can cause a great deal of concern. Parents have a tendency to create "winning at all costs" attitudes, which can teach children poor sportsmanship values (Kieth, 1997). In addition, Radhakrishna et al. (2006) found that parental involvement can lead to unethical practices and unhealthy environments when it comes to 4-H competitive activities.

Rusk, Summerlot-Early, Machtmes, Talbert, and Balschweid (2003) also revealed that in order to have a good livestock show, exhibitors must compete fairly. Participants in their study reported that they had witnessed cheating in the exhibition process and people were doing unethical things in order to win. However, Rusk and his colleagues also found that for some 4-H livestock projects are not all about winning, rather, they should be about fun, friendships and the ways families have a chance to be together (Rusk, et al., 2003).

2.8 Life Skill Development through Livestock Exhibition

Hendricks (1996) defined life skills as “abilities that help an individual to be successful in living a productive and satisfying life.” Developing life skills has become a foundation of the 4-H program, and according to Boyd, Herring, and Briers (1992) life skills are needed by youth for their everyday life when they become adults. Examples of life skills include responsibility, communication, time management and decision-making (Hendricks, 1996). Life skills are significant in that they are necessary for adulthood skills. As youth mature, they will need skills in working with others, understanding their self, communicating and leadership (Boyd et al., 1992). In turn, life skills will allow youth to adjust to their environment by making responsible decisions, better understanding their values and being able to understand and cope with others (Boyd et al., 1992).

Researchers (Gamon et al., 1992; Sawyer 1987) studied the life skills gained from livestock exhibition and found that there are many benefits to exhibiting livestock. For example, Gamon and her colleagues (1992) found that livestock exhibitors developed life skills as a result of participating in a livestock project. Participants also revealed that

they gained more life skills than animal subject matter skills through their livestock project. Likewise, Sawyer (1987) found that 4-H animal science project exhibitors in Oregon gain life skills in responsibility, decision-making, communication, getting along with others and leadership.

Similarly, while researching life skills gained by New Jersey, Ward (1996) found that exhibiting livestock impacted life skill development among 4-H animal science project alumni. Respondents indicated that they gained life skills such as spirit of inquiry, ability to accept responsibility, decision making and maintaining records. Findings also indicated that participating in a livestock project helped participants gain skills to land job interviews and get into colleges and universities with careers related to their participation in the livestock project.

Boleman, Cummings, and Briers (2004), found parents believed that through participation in livestock projects their children gained the life skills they needed to achieve later in life along with setting goals; and that their livestock project was essential in their children's knowledge of the livestock industry. This study suggested that the longer a child is engaged in a livestock project, the more likely they are in developing the life skills that will make them more productive adults. Similarly, Rusk, Summerlot-Early, Machtmes, Talbert, and Balschweid (2003) found that youth were able to accomplish project and life skills in the areas of sportsmanship, animal grooming, animal health and animal selection.

2.9 Conceptual Framework

The conceptual framework of this study was developed based on key factors that influence and shape youth livestock project exhibitors exhibition experiences. These factors include: (a) youth-adult interactions (i.e., source of knowledge and positive behaviors), (b) views of competition, (c) cumulative adult sources of livestock knowledge, and (d) youth's perception of livestock exhibition motives. Youth-adult interactions, views of competition, sources of livestock knowledge and youth's perception of livestock exhibition motives serve as the independent variables for the study. The dependent variable of the study was the youth's perception of life skill development.

The other essential factor of this model is the relationship between the independent variables and the dependent variable. The youth-adult interaction is seen as a source of livestock knowledge and also represents the behaviors exhibited by the adults. This interaction may affect the youth's view of competition or livestock knowledge and youth's overall livestock exhibition experience ultimately, effecting how the youth perceive life skill development. Figure 1 provides a visual depiction of how these factors influence the youth livestock exhibition experience.

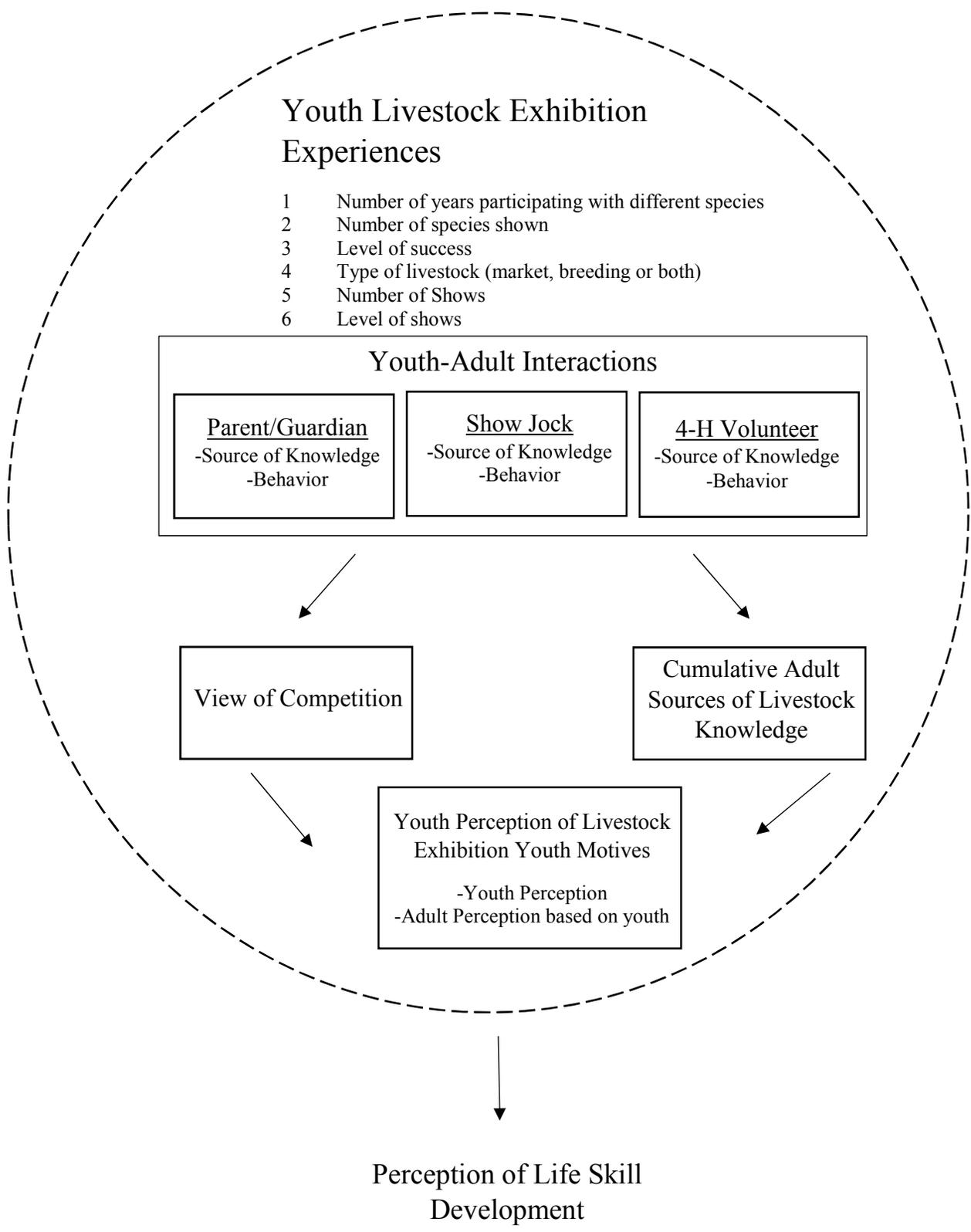


Figure 1. *Conceptual Framework of Youth Livestock Exhibition Experiences*

2.9.1 Youth Livestock Exhibition Experiences

Youth livestock exhibition experiences include the amount of experience and level of achievement or participation within a youth's livestock exhibition career. In a study by Davis, Kieth, Williams, and Frazee (2000), they found that the benefits of youth participating in competitive livestock exhibition include the themes of social relationships, family, character, exposure to competition, knowledge and care of animals and an exposure to cultures. Through not only 4-H livestock shows, but through open, state and national shows, youth are exposed to different learning experiences and different adults, peers or professionals that influence their participation and longevity of a livestock project, as well as the skills they gain from exhibiting (Gamon, Laird, & Roe, 1992). In their study, youth livestock exhibition experiences were seen as: (1) the number of years participating with different livestock species, (2) the number of species shown, (3) the level of success at different livestock shows (e.g., county, state, open/jackpot, national shows), (4) the type of livestock shown (e.g., market breeding, both), (4) the number and level of shows, and (5) from whom youth buy their exhibition livestock. Simply, these experiences take into effect the perceptions youth have on competition, their motivations, life skills and their knowledge of livestock skills.

2.9.2 Youth-Adult Interactions

Youth-adult interactions act as a critical feature to the development, psychology and engagement of youth (Zeldin, Christens, & Powers, 2013). Social interactions allow adults to pass on information, values, and goals on to youth, ultimately directing youth's thinking toward content and values in a specific area of interest (Bronfenbrenner, 1979).

According to Jarrett (2003), without an adult interaction, youth lack informational, social and other resources necessary to their development. Interactions between youth and adults are supportive in nature. Adults are given the opportunity to serve as role models and mentors that will enhance youth's academic and interpersonal skills (Williams & Kornblum, 1985).

Adults, including parents and non-familial adults, play a key role in shaping the youth of today into healthy, caring and productive future citizens (Halpern, 2005). Parental relationships are crucial for youth during early childhood, however, in an effort to find their identity during adolescence, youth increasingly distance themselves from their parents and explore interactions beyond the home setting (Fuligni & Eccles, 1993). Adolescent aged youth who interact with non-familial adults are reported to have improved academic success, enhanced knowledge and an improved transfer of learned content to practical settings (Camino & Zeldin, 2002).

Similarly, Jarrett, Sullivan, and Watkins (2005) found that youth and adults come together in favorable circumstances and interact, resulting in positive environments. Furthermore, they discovered that in most cases youth were interacting with an adult that shared a common interest or goal and the interaction encouraged youth to create more meaningful and positive social changes. Some respondents in their study even declared that interacting with adults progressed their development as they became more comfortable and willing to work with different adults.

In this study, youth-adult interactions are seen as a source of livestock knowledge for youth and the behaviors that adults exhibit toward youth when it comes to exhibiting livestock. The adults that youth work with could be a parent/guardian, show jock, or a 4-

H volunteer. The interactions that youth have with these adults could impact the way that youth view competition, the skills that are learned through a livestock project and the motivations youth have for participating in livestock shows. For example, in youth-adult interactions, adults act as allies with a common cause, therefore, the adult can influence youths' values and goals (Jarrett et al., 2005).

2.9.3 View of Competition

Competition has been accepted as a valuable teaching and learning strategy for youth organizations such as 4-H. Researchers (Wessel & Wessel, 1982; Fetsch & Yang, 2002) found that competitive events in the 4-H program yield many positives on youth development such as helping youth learn the value of democratic values, greater academic success and increased self-motivation. Additionally, Keith and Vaughn (1998) revealed that competition in 4-H challenged youth to work harder and to work for what they get, increased learning in various subjects and created an incentive to continue as a member of the 4-H program. Finally, Radhakrishna, Everhart, and Sinasky (2006) found that older siblings, parents, adults and Extension Educators were helpful in the preparation of 4-H competitive events and revealed that there was a positive relationship between the amount of awards won in 4-H and participation in other competitions as an indicator of youth's positive view on competition.

For this study, the view of competition is the youth's perception on how they view competition in their livestock project. Their view on competition can be influenced by their interaction with an adult mentor and can ultimately affect their exhibition experience and their perception on the life skills they have gained. For example, pressure

put on by adult mentors to do well in a competition can lead to unhealthy practices and competitions which can ultimately affect how youth see competition (Kieth, 1997).

2.9.4 Sources of Livestock Knowledge

Gamon et al. (1992) revealed that parents and adult mentors are a major source of livestock project skills and information. Animal knowledge project skills include any skill that is learned from participating in a livestock project. This can include animal grooming, nutrition, genetics and evaluation (Rusk et al., 2003). It is important for youth to not only strive to do the best they can do with their livestock project, but to learn the necessary skills needed to make the livestock project be presented the best that it can be for themselves. Thus, it is important for adults to teach these concepts to youth in order for youth to be successful. It is also important to know which adult mentor (i.e., parent/guardian, show jock, 4-H volunteer) teaches these livestock skills to the youth in order to enhance professional development for 4-H staff. Knowing which adult is or is not a major knowledge provider can cause 4-H staff to rethink their policies of youth-adult interactions in livestock projects.

2.9.5 Livestock Exhibition Motives

Livestock exhibition motives are seen in this study as (1) winning shows, (2) making money, (3) developing life skills, and (4) learning livestock skills. Competition is a strong driving force when it comes to motivating the livestock project participant. Winning and reward incentives such as trophies and ribbons can take over the livestock project and become the chief mediating variable of involvement and retention in the project (Davis, 1998). In other cases, however, receiving premium money for the animal

at the end of a show acts as a driving force for participating in the project (Davis, 1998). On the other hand, youth can be intrinsically motivated in livestock exhibition because they have the desire to participate in experiential learning experiences which allows them to use those experiences and relate it to school, a career, or their adult life (Zanolini, 2011).

2.9.6 Ecological Systems Theory

Ecological systems theory was used in this study to elucidate the youth-adult interactions within livestock exhibition. Livestock exhibitors interact with various adults which can impact the skills they develop and shape the way believe in something. The adult's behavior within livestock exhibition can also effect the youth's outcomes and knowledge as well as perceptions of their ability to perform well. When adults exhibit both positive and negative behaviors, youth will exhibit similar behaviors, affecting their abilities perform fairly and develop positive life skills and knowledge.

Ecological systems theory implies that a child's development lies within the context of the relationships that form an individual's environment (Bronfenbrenner, 1992). Recently renamed the "bio-ecological systems theory," Bronfenbrenner (1992) defines the theory as having complex layers of the environment that effect a child's development. The interactions between an individual's changing biology, their family and community environment, as well as society's landscape will fuel development. Therefore, in order to understand youth's development, their immediate environment and interactions within that environment must be taken into consideration (Bronfenbrenner, 1992).

According to Bronfenbrenner (1992), the layers that make up an individual's environment are the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The microsystem is the layer closest to the child and contains features that are in direct contact with the child such as family and school (Ryan, 2001). In other words, this system encompasses the relationships and interactions a child has with their immediate surroundings (Berk, 2000). The mesosystem is the layer that connects the structures in the microsystem such as the relationship between a child's activity and their parents (Berk, 2000). The exosystem is the layer of the larger social system that functions indirectly on their environment (Ryan, 2001). For example, when a parent is stressed from work and behaves irritably at home, the actions of the parent will impact the child (Tudge, Mokrova, Hatfield, & Karnick, 2009). The macrosystem is comprised of cultural values, beliefs and laws, which influences all of the other layers and the developing person (Berk, 2000; Tudge et al., 2009). Finally the chronosystem acts as a function of time, where developmental processes will vary because of events that occur at different ages of an individual (Bronfenbrenner & Morris 1998).

Youth programs make an impact on the development of youth and such programs provide an opportunity for youth to develop the skills needed in their adult life. Duerden and Witt (2010) used the ecological systems theory to assist positive youth development practitioners in ways to improve their programs, as well as to encourage them to form relationships in and between the life contexts in order to impact their participants' lives. Huebner and Mancini (2003) explored predictors of youth's participation in out-of-school activities guided by the ecological system theory. They revealed that factors influencing youth's participation were drawn from the ecological niches. Parental relationships and

family structures were related to youth's participation in out-of-school time and extracurricular activities. Youth-adult interactions also can be guided by this theory. For example, Adamsons, O'Brien, and Pasley (2007) used the theory to provide a framework to examine the differences between father involvement in an activity and quality father-child interactions based on individual and contextual factors that influence the involvement. It was found that the contextual factors (i.e., step-father, biological father) did not differ in the amount of involvement and engagement with their child, but the family processes did differ.

2.9.7 Positive Youth Development

The framework of positive youth development was chosen to inform the life skills variable in this study for two primary reasons. First, youth livestock exhibitors who show livestock through the 4-H Organization have the opportunity to gain life skills and work alongside adults to impact their positive development. Second, the environment surrounding a youth livestock exhibitor and the adults they work with on their livestock project shape their development and specific skills that they gain.

Positive youth development is a fundamental assumption that results in positive, enduring features in a young person's life that is achieved through guidance, support, opportunities and involvement (Mahoney & Lafferty, 2003). With help from other youth, adults and the community, youth are able to enhance their abilities, skills and interests in order to live a healthy and satisfying life (4-H, 2015). The roots of positive youth development are supported by the developmental systems theory (Lerner, 2002). Developmental systems theory is based on the biological development and evolution of an individual where an emphasis is placed on an individual's environment and genes as a

factor of development (Damon, 2004; Lerner et al., 2009). According to Hamilton, Hamilton and Pittman (2004), developmental systems theory is used in three ways: process, principles and practice. Process stresses the developmental tasks of an individual. Principles infer that youth need to be provided with opportunities and support to become productive adults (Battavick, 1997). Damon (2004) also emphasizes that the principles of positive youth development manifest the potentials of youth and not their incapacities. Finally, practice is the actual application of the positive youth development framework. When positive youth development works alongside the developmental systems theory many problem behaviors are reduced and there is a promotion for desired life outcomes (Lerner, Almerigi, Theokas, & Lerner, 2005).

Positive youth development organizations, such as the 4-H Organization, aim to improve the development and lives of youth (4-H, 2015). In order to promote this, the 5 C's of positive youth development are conceptualized in these organizations (Lerner, 2004). Lerner (2004) and Blum (2003) imply that youth development organizations will result in the 5 C's when there is an involvement of youth-adult relationships, skill building activities and opportunities for youth to have a leadership role within the community. If youth have a mutual relationship with people, institutions, and their social world, their future will thrive because of their contributions to their self, community, and family (Lerner et al., 2005). Positive youth development is not only evident in youth organizations, but in competitive youth events as well. Eccles, Barber, Stone, and Hunt (2003) found that participation in competitive sporting events are associated with both positive and negative outcomes for youth. Competition plays a key role in developing positive skills in youth, allowing youth to self-evaluate themselves and build character,

but at the same time collaborative skills can expose youth to experiences that can challenge their character (Hansen, Larson, & Dworkin, 2003). Participation in competitive events can also elicit positive educational and occupational outcomes for youth (Eccles et al., 2003).

2.10 Theoretical Framework

In this study, self-regulation theory was used as the theoretical framework. Self-regulation contends that thoughts, feelings, actions and goals are all self-generated and that youth learn on their own and take their own responsibility or personal initiative (Zimmerman, 1994). However, in order for these aspects to occur, individuals must be self-motivated as well as self-directed in their learning competence. Therefore, variables such as goal setting, self-beliefs and intrinsic interest have emerged within self-regulation (Schunk, 1994). Self-regulation is not a fixed characteristic of an individual, rather it is a context specific feature that arises when an individual wants to succeed (Zimmerman, 1989). According to Zimmerman (1994), self-regulation relies on self-regulatory practices such as time management, self-consequences, help seeking and goal setting and are not only measured in the academic setting, but once mastered are used throughout life in different contexts and at home.

Self-regulation is something that individuals do for themselves, not something that is done to or for them (Zimmerman & Pons, 1986). In order for a skill to be mastered, individuals must apply cognitive strategies to a task within a relevant setting (Schunk & Zimmerman, 1998). As such, this takes repeated attempts to learn because mastery involves incorporating personal, behavioral and environmental components in order to work (Schunk & Zimmerman, 1998). Self-regulation can occur in three phases:

forethought, performance and self-reflection. Forethought refers to the processes and beliefs that precede learning and sets the stage for learning to occur. Performance is the process where learning occurs, which could affect performance and concentration. Lastly, self-reflection involves the processes that occur after learning and gives individuals a chance to react and reflect on the experience (Schunk & Zimmerman, 1998).

Several studies have used self-regulation to inform motivation, goal setting and success throughout academic and non-academic settings (Chen & Singer, 1992; Filcher & Miller, 2000; Ricketts, Carter, Place & McCoy, 2012) Filcher and Miller (2000) studied learning strategies in distance learning environments and revealed that students in distance learning environments monitor their own success and use self-regulation as a metacognitive strategy in order to succeed. Similarly, Ricketts, Carter, Place and McCoy (2012) studied extension staff from three states to determine how extension professionals motivate themselves to succeed. It was discovered that most extension professionals self-regulate themselves with strategies such as self-rewarding and punishing and using self-talk strategies in order build valuable leadership skills. Chen and Singer (1992) also highlighted that individuals lack the ability to self-regulate and use self-regulation techniques in order to learn and train in athletic settings. Concerns arose that there are possible problems with traditional training techniques, however, the authors revealed that self-regulation is a necessary component of traditional training techniques when the individual is in control.

For this study, self-regulation was chosen to better understand how youth livestock exhibitors regulate and take action in their own learning and motivations for

two primary reasons. First, livestock exhibitors must have the capacity to learn the skills needed to be successful with their livestock project. Exhibitors must set-goals, take responsibility and manage their learning in order to succeed in the project. Second, self-regulation was used to understand youth's motivations for exhibiting livestock and their intrinsic interest in livestock exhibition. The parent's motive was also used as an approach to assess youth's motivation (i.e., exhibition motives).

2.11 Need for the Study

Research focusing on the youth exhibition experiences of livestock project participants as it pertains to the role of the adult and their influence on youth's competition and learning experiences is somewhat limited. Of the prior research focused on livestock projects, several life skills and motivational factors have been identified. Rusk et al. (2003) found that livestock project participants gained educational skills from participating in a livestock project such as animal health, nutrition and grooming skills. Previous research also revealed that adult mentor involvement can affect youth's performance in a competitive activity (Davis, 1998). However, no research was found that examined the adult mentor's role in competitive events such as livestock projects and the influence those relationships have on the experiences and successes of the youth livestock project.

Competition is a widely accepted teaching strategy when it comes to livestock projects and exhibition experiences. Competition also acts as a motivator for youth to achieve well at certain tasks in their program. Numerous studies have revealed that competition fosters responsible social behavior, motivated youth to set and achieve goals, and achieve greater academic success (Keith & Vaughn, 1998; Ladewig & Thomas,

1987; Weber & McCullers, 1986). In turn, Perkins (2000) argued that competition in youth activities has negative influences on the individual. He revealed that competition decreases self-esteem and fosters individualism and is not a focus when it comes to sportsmanship and fairness.

Blue ribbons, trophies and other incentives are seen as motivators for youth to succeed and continue with many 4-H activities (Weber & McCullers, 1986). This study addressed a gap in the literature by focusing on previously unexplored variables of the youth's view of competition, sources of livestock knowledge, youth-adult interactions, and youths' motives for exhibiting livestock. Specifically, this study examined the extent to which these factors influence the youth exhibition experience and perceptions of life skills in a livestock project. Finally, this study will extend the research on youth-adult interactions within the youth development organization literature and address the need to understand the roles that adult mentors have on youth livestock exhibition and the effects of these interactions on life skill development.

2.12 Summary

To conclude this chapter, the literature review methodology was presented along with pertinent studies defining livestock projects and youth-adult interactions. The roles of competition and learning in livestock projects was presented and the role that adult mentors play in competitive youth events was explained. The conceptual model of the factors affecting the youth exhibition experience was presented, including the independent variables of a youth-adult interaction, view of competition, sources of livestock knowledge, and youths' perception of exhibition motives. The theoretical framework of self-regulation that informed this study was further outlined as well.

While the life skill experiences in livestock projects and the role of competition in youth activities has been studied, no research was identified that demonstrated the overall exhibition experiences of youth exhibitors. The relationship between the youth-adult interaction and its effect on youth's view of competition and sources of livestock knowledge also remains unexplored. Additionally, no studies were found that described the influence of youth-adult interactions on the motives for participating in livestock projects. Finally, an understanding of youth livestock project exhibition experiences serves as a foundational block for preparing and assisting many educators, parents and volunteers who are active in livestock exhibition, thus, further research on these topics is needed.

CHAPTER 3. METHODOLOGY

3.1 Introduction

This chapter will provide an overview of the research procedures and methods employed in this study. Specifically, this chapter will describe the purpose, research questions and research design. This chapter will also address the criteria used to choose the selected participants and schools in the study. Development of the instrument used to measure the variables, as well as the reliability and validity measures of the instrument are presented. Finally, the data collection procedures, management and data analyses will be explained.

3.2 Purpose of the Study

The purpose of this study was to describe and explain factors that predict youth livestock exhibitors' perceptions of life skill development informed by their livestock exhibition experiences, youth-adult interactions regarding livestock knowledge, views of competition, and livestock exhibition motives.

3.3 Research Questions

1. What were youth exhibitors' livestock exhibition experiences (i.e., number of years participating with different species, number of species shown, level of success, type of livestock shown, number of shows, level of shows)?
2. Which adults (i.e., parent/guardian, show jock, 4-H volunteer), according to the youths' perceptions, served as sources of livestock knowledge and modeled positive behaviors regarding livestock exhibition?

3. What were youth exhibitors' views of competition and perceptions of livestock exhibition motives (i.e., youth perception, youth's perception of parent/guardian)?
4. To what extent did youth perceive the development of life skills through their livestock project?
5. To what extent was there an agreement of youth's livestock exhibition motives and how they perceived their parent/guardians' motives?
6. To what extent could youth exhibitors' livestock exhibition motives (i.e., competition (aka winning shows) and learning (aka, developing life skills, making money, learning livestock skills) be predicted based on youths' livestock exhibition experiences (i.e., youth-adult interactions, view of competition, the extent adults served as sources of livestock knowledge, youth perceptions of parent/guardians' livestock exhibition motives)?

3.4 Research Design

This descriptive exploratory research study utilized a quantitative research design to explore youth livestock exhibitor's exhibition experiences, youth-adult interactions, as well as their perceptions on competition and life skills gained from livestock exhibition. Research questions one through six were examined using a quantitative approach. The rationale for this approach was based on the study's theoretical and conceptual frameworks, as well as the current recommendations of the literature regarding competition, learning experiences and youth-adult interactions in livestock projects. This study was conducted from a positivist paradigm, which refers to the approach that reality can be observed and that it relies on logic, evidence and experience to reveal this reality (Larrain, 1979; Mack, 2010). Therefore, a survey research design allows participants to

report their perceptions and experiences and provides a descriptive look into youth exhibitor's livestock exhibition experiences. Youth livestock exhibitors from multiple counties in the state of Indiana were surveyed in this study. The results were analyzed using deductive reasoning.

3.5 Institutional Review Board Approval

To protect the rights of the participants involved, the researcher first completed the Collaborative Institutional Training Initiative (CITI) Course in the Protection of Human Research Subjects online training. After completion of the training, an application, complete with all materials and instrumentation was submitted to the Institutional Review Board (IRB) and Committee on the Use of Human Research Subjects at Purdue University. The researcher was granted approval for research to begin on September 15, 2016 by the IRB. The IRB protocol information and letter can be found in Appendix A, for the research study entitled "Youth Exhibition Experiences in a Livestock Project" (IRB protocol: 1608018030).

3.6 Selection Criteria for High School Agriculture Programs

The target population for the study were high school agriculture programs that included students who participated in livestock projects. This group was targeted because they have a focus on teaching agricultural sciences and include many livestock project exhibitors. The school-based agriculture programs were chosen based on criteria of participation and success in livestock projects and related activities through 4-H among youth in the schools respective county. Indiana State Fair livestock show results were analyzed to determine the competitiveness of a county and the number of livestock

exhibitors in Indiana counties were analyzed to determine the extent of participation in livestock projects. The USDA Census of Agriculture (2012) was also used to determine the inventory and sales of livestock species in selected Indiana counties. After several counties were chosen for the study based on the criteria and location, one high school agriculture program was then identified in that county to participate in the study.

After correspondence with teachers and school personnel, five school-based agriculture programs, each located in a different county, agreed to collaborate on this research project and were surveyed. Those school programs include: School #1, School #2, School #3, School #4 and School #5. An additional agriculture program was selected to be utilized as a field test of the survey measures. This program was not included in the final data collection. Additionally, results from the field test were not analyzed or reported due to the low number of responses ($N = 25$).

3.7 Selection Criteria for Study Participants

High school agriculture students pursuing livestock projects in the five participating school-based Agricultural Education programs were the target population of this study. Study participants also had to meet the following criteria in order to be included in the final data analysis: 1) were a full-time student enrolled in at least one high school agriculture class, 2) were a member of 4-H and 3) participated in either a beef, sheep, swine or goat project. Students who did not meet this criteria were unable to complete the entire survey, and were excluded from the data analyses. There were 159 participants who met the criteria and were included on the final data analyses.

Participants were recruited through the agriculture educator at each of the selected agricultural programs. The agricultural educators were asked to send a letter home to students' parents explaining the study and to get permission in an attempt to make the students feel more comfortable with responding to the questionnaire and to increase the response rate. Through a series of emails between the researcher and the agricultural educators, the researcher visited each agriculture program for one school day to administer the questionnaires to all agriculture classes. Information regarding the researcher's contact information along with a statement of confidentiality was given out at that time. No identifiable information was available to the researcher through the survey, thus the survey was completely anonymously.

3.8 Instrumentation

A review of the literature revealed no single instrument that would address the research questions of the study. Therefore, an approach was taken to develop an instrument to measure the variables of interest in this study. The final instrument (Appendix B) consisted of information regarding: 1) Demographic Information, 2) Sources of Livestock Knowledge, 3) Competition, 4) Youth-Adult Interactions, 5) Life Skills, and 6) Livestock Project Motives. This instrument was administered in person at all participating programs. It took 15 to 20 minutes for the participants to complete the questionnaire.

3.8.1 Demographic Information

The first section of the instrument contained items regarding demographic information about the study participants and his/her livestock project. These items

elicited information such as: participants' age, gender, school grade, whether or not they were a member of 4-H and if they participate in a livestock project. Additionally, the survey elicited information about the participant's livestock project and included items such as: the number of years each species was shown, the species of livestock shown the most, how often (e.g., one show, two shows, three shows, etc.) and where (e.g., county fair, state fair, open show, national show) the participant exhibits his/her livestock, the level of achievement in the livestock project (e.g., class winner, breed champion, grand champion, etc.), and the type (e.g., market animal, breeding animal) of animal shown, as well as where the exhibitors receive their animal (e.g., other producers, show jock, etc.).

3.8.2 Sources of Livestock Knowledge

Section one of the questionnaire had participants respond to 13 items regarding the adult source (e.g., parent/guardian, show jock, 4-H volunteer) of where he/she received a specific livestock skill. Participants were asked to identify the adult who served as the primary source of information. The 13 items were developed based on the Indiana State Standards (2016) Advanced Life Science Animals course and the National 4-H Curriculum (2016). Example items from this section included: "Explain the steps to properly groom my animal in preparation for show," "Identify facilities needed to house and care for my animal safely and efficiently," and "Explain the purpose and benefits of feed additives." Participants were asked to indicate which adult acted as a source of knowledge for each specific skill by checking a box that corresponded with: "*Parent/Guardian,*" "*Show Jock,* or "*4-H Volunteer.*" If the participant did not learn a specific skill, he/she checked: "*Did Not Discuss.*"

3.8.3 Competition

Section two of the instrument focused on participants' perceptions on competition in a livestock project. This variable was assessed through the modification and development of items based on two previous surveys developed by Harris and Houston, (2010) and Radhakrishna, Everhart, and Sinasky, (2006) that focused on competition in sports and 4-H activities. A four-point Likert-type response scale, ranging from 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Agree*, to 4 = *Strongly Agree* was used. The 18 items were randomly ordered and evenly divided with both positive competition statements and negative competition statements. Example of item statements were: "Competition in livestock events is beneficial to my positive development," (positive) and "Competition in livestock exhibition encourages cheating," (negative). Higher scores indicated a higher level of agreement to competition as a driving force for a livestock project and competition as a hindrance to livestock projects. The 18 items were slightly modified from the original scale to fit the overall language of this study for the participants. For example, "Competition is an incentive for me to participate in 4-H" was changed to "Competition is an incentive for me to participate in livestock exhibition."

3.8.4 Youth-Adult Interactions

Sections three, four and five of the questionnaire contained six items for each section that measured participants' beliefs regarding adult interactions based on their experience with each adult (i.e., parent/guardian, show jock, 4-H volunteer) and how those interactions provoked their performance in a livestock project. This scale was modified based on a previous questionnaire developed by Homan (2004) that focused on

adult pressure in 4-H and youth sporting events, as well as items taken from the Youth Experience Survey (YES) 2.0 instrument by Hansen and Larson (2005). Participants were asked to indicate how often their parent/guardian, show jock, or 4-H volunteer pressured or helped them in their livestock project using a five-point Likert-type response scale: 1 = *Not At All*, 2 = *A Little*, 3 = *Sometimes*, 4 = *Quite A Bit*, 5 = *Yes, Definitely*. Section three included statements regarding the parent/guardian interaction, section four included statements regarding the show jock interaction, and section five included statements regarding the 4-H volunteer. Each of these three sections included the same six items. Examples of items include: “My parent/guardian gets upset with me when I don’t perform well with my livestock,” “My show jock is proud of me when I don’t perform well with my livestock in the show ring,” or “I had good conversations with my 4-H volunteer because of showing livestock.” If a participant did not work with a show jock or a 4-H volunteer in their livestock project they were asked to skip that section.

3.8.5 Life Skills

Section six of the questionnaire contained 18 items that measured life skill development from a livestock project. This scale was developed from the existing Youth Experience Survey (YES) 2.0 by Hansen and Larson (2005) that focused on youth experiences and life skills. Select items were chosen from the YES 2.0 survey to be included in the instrument based on the previous literature pertaining to life skills gained by participating in a livestock project. Goal setting, effort, problem-solving, time management and leadership/responsibility were a few of the life skills reported by the literature and those sections were chosen from the YES 2.0 instrument to be included in this study’s instrument. Participants were asked to indicate if they had gained each life

skill in their livestock project by responding to a five-point Likert-type scale: 1 = *Not At All*, 2 = *A Little*, 3 = *Sometimes*, 4 = *Quite A Bit*, 5 = *Yes, Definitely*. Examples of items include: “I set goals for myself,” “Practiced self-discipline,” “Learned that emotions affect how I perform,” and “I put all of my energy into this activity.”

3.8.6 Livestock Project Motives

The last section of the instrument asked participants to rank their motives, or reasons, for participating in a livestock project. Participants were also asked to complete a ranking of their perception of how their parents would rank the items on why they want their son/daughter to show livestock. This section was developed by the researcher to better understand the driving force behind exhibitors’ participation in a livestock project as well as the parents’ motives. In the first question participants were asked to rank (first, second, third, fourth) their motives by placing a number next to each statement. A “1” was used as the most important and a “4” was used as the least important. Based on previous studies, the four items that were ranked in this section were: *Developing Life Skills*, *Making Money*, *Learning Livestock Skills*, and *Winning Shows* (Davis, 1998; Rusk et al., 2003; Sawyer, 1987). Additionally, the second question in this section asked the participants to rank the reasons their parent/guardian wants him/her to show livestock. The same items and scale were used in this question. Finally, participants were asked to indicate if their parent/guardian showed livestock as a youth by checking a box that corresponded with: “Yes,” “No”, or “I Don’t Know.”

3.8.7 Validity

Validity is the extent to which the results of a survey instrument can precisely examine the construct of interest accurately (Thomas, 2009). Construct validity is important so that researchers can accurately interpret and apply results. The 4-H Competitive Event Scale (Radhakrishna, Everhart, & Sinasky, 2006), the Competitive Index Scale (Harris & Houston, 2010), the Adult Pressure in 4-H and Sporting Events Scale (Homan, 2004) and the YES 2.0 Scale (Hansen & Larson, 2005) were previously validated by their respective developers.

Demographic items, livestock knowledge items and livestock project motive items were evaluated for face and content validity by a panel of experts. The panel of experts consisted of five faculty members and one graduate student. They were chosen based on their knowledge on research methods, survey development, livestock project knowledge and experience and educational studies. No major issues of validity were identified, but minor edits were made to a few items.

3.8.8 Reliability

Reliability is the extent to which an instrument will provide the same consistent results across different occasions (Thomas, 2009). Previous researchers established reliability measures of the 4-H Competitive Event Scale (Radhakrishna, Everhart, & Sinasky, 2006), the Competitive Index Scale (Harris & Houston, 2010), the Adult Pressure in 4-H and Sporting Events Scale (Homan, 2004) and the YES 2.0 Scale (Hansen & Larsen, 2005). Reliability scores for the field test and current study were

computed using Cronbach's Alpha Coefficient and are shown in Table 3.1. According to Kline (1999) and Nunnally (1978), reliabilities above 0.70 are considered acceptable.

Table 3.1 *Reliabilities for the Scales in the Current Study*

Scale	Cronbach's α
	This Study's Reliabilities
Competition Scale	0.73
Adult Behavior Scale	0.74
Life Skill Scale	0.84

Note. The three adult roles were computed as one reliability coefficient.

3.9 Data Collection

Email messages to the high school agriculture programs' principals that contained a permission letter for the teacher and principal to read and sign were first sent out in order to gain permission by school personnel to conduct the study in the school (Appendix C and D). Upon gaining permission from the schools, emails regarding a detailed research plan were sent to each of the participating high school agriculture programs' educators. The purpose of the emails were to help develop agendas for the on-site visits as well as to identify dates to visit the classroom and to help identify class sizes. Additional emails were sent to the teacher containing letters to the parents and parental consent forms that needed to be sent home with the students (Appendix E and F). The purpose of the letter and consent form was to explain to the parent what the survey is and what it will be asking of their child. The letter and consent form also explained the potential risks, benefits and confidentiality of the survey. The parental consent forms

were signed by the parents and returned to the agriculture educator for pick up by the researcher. Students enrolled in agriculture classes from the five high school agriculture programs were surveyed.

During the class visits, the researcher administered assent forms to the students that explained the details of the survey (Appendix G). The researcher also informed the students about the purpose, content, confidentiality and contact information of the investigator of the study. Subsequently, paper copies of the survey were distributed to the students.

The survey took 15 to 20 minutes for the participants to complete. The surveys were returned to the researcher after they were completed by the students. The researcher spent one full school day at each school and distributed surveys to all agriculture classes. Data collection began October 10, 2016 and ended on October 17, 2016.

3.9.1 Participant Response

Of the 541 students enrolled in agriculture classes at the participating high schools, there was a 100% initial response rate to the survey. Upon examination of the surveys, however, 382 of the surveys were not fully completed and removed from the data set. This was due to an established *a priori* that participants must have been in 4-H and exhibited a livestock project in order to complete the entire survey. After eliminating participants that did not meet these qualifications, a final total of 159 participants were included in the analyses. The data collection schedule and the number of responses from each school are shown in Table 3.2.

Table 3.2 *Steps in the Data Collection Process*

Dates of Data Collection	School	Total Number of Surveys Completed	Total Number of Surveys Used for Data Analysis	Percent Response
October 10	School #1	67	19	28.4%
October 11	School #2	168	18	10.7%
October 13	School #3	64	24	37.5%
October 14	School #4	94	41	43.6%
October 17	School #5	148	57	38.5%
Total Completed Surveys		541	159	100%

Note. The “total completed surveys” includes all responses from participants, even those who did not meet the study criteria.

3.10 Data Management

Following the coding for the quantitative data, the data for this study was stored in electronic form on a secured departmental server in accordance with IRB guidelines. Any print information remained locked in a secure file cabinet in accordance with IRB.

3.11 Data Analysis

All quantitative variables were analyzed using the Statistical Package for the Social Scientist (SPSS), Version 23 according to a researcher designed codebook. Table 3.3 lists the research questions, variables, and scale of measurement, and data analysis procedures.

For research question 1, “*What were youth exhibitors’ livestock exhibition experiences (i.e., number of years participating with different species, number of species shown, level of success, type of livestock shown, number of shows, level of shows)?*” descriptive statistics were utilized. Means, standard deviations, frequencies and

percentages were used to describe the exhibition experiences of youth livestock exhibitors.

For research question 2, *“Which adults (i.e., parent/guardian, show jock, 4-H volunteer), according to the youths’ perceptions, served as sources of livestock knowledge and modeled positive behaviors regarding livestock exhibition?”* descriptive statistics were also utilized. Specifically, means and standard deviations were used to describe the average number each source (i.e., parent/guardian, show jock, 4-H volunteer) of livestock knowledge that was utilized in the youth-adult interaction.

For research question 3, *“What were youth exhibitors’ views of competition and perceptions of livestock exhibition motives (i.e., youth perception, youth’s perception of parent/guardian)?”* descriptive statistics were used. In particular, means and standard deviations were used to describe youth exhibitor’s perceived perceptions of competition and frequencies and percentages were used to indicate youth’s exhibition motives and their perceptions of their parent/guardians’ motives.

For research question 4, *“To what extent did youth perceive the development of life skills through their livestock project?”* descriptive statistics were utilized. Specifically, a mean and standard deviation was used to describe the perceived levels of life skill development for youth livestock exhibitors.

For research question 5, *“To what extent was there an agreement of youth’s livestock exhibition motives and how they perceived their parent/guardians’ motives?”* descriptive statistics were utilized. Specifically, frequencies and percentages were used

to describe the level of agreement between youths' motives for exhibiting livestock and how they perceived their parent/guardians' motives.

For research question 6, *“To what extent could youth exhibitors' livestock exhibition motives (i.e., competition (aka winning shows) and learning (aka, developing life skills, making money, learning livestock skills)) be predicted based on youths' livestock exhibition experiences (i.e., youth-adult interactions, view of competition, the extent adults served as sources of livestock knowledge, youth perceptions of parent/guardians' livestock exhibition motives)?”* a discriminant analysis was utilized. Discriminant analysis was used to allow the researcher to make predictions of a dependent variable based on the responses to the independent variables.

Table 3.3 *Research Questions, Variables, Scale of Measurement, and Statistical Analysis Utilized*

Research Question	Independent Variable	Dependent Variable	Scale of Measurement	Analysis
RQ1: What were youth exhibitors' livestock exhibition experiences (i.e., number of years participating with different species, number of species shown, level of success, type of livestock shown, number of shows, level of shows)?		Life Skill Development	Nominal Scale	M SD Frequencies Percentages
RQ2: Which adults (i.e., parent/guardian, show jock, 4-H volunteer), according to the youths' perceptions, served as sources of livestock knowledge and modeled positive behaviors regarding livestock exhibition?		Life Skill Development	Scale	M SD Median
RQ3: What were youth exhibitors' views of competition, the extent adults served as sources of livestock knowledge, and perceptions of livestock exhibition motives (i.e., youth perception, youth's perception of parent/guardian)?		Life Skill Development	Nominal Scale	M SD Frequencies Percentages
RQ4: To what extent did youth perceive the development of life skills through their livestock project?		Life Skill Development	Scale	M SD
RQ5: To what extent was there an agreement of youth's livestock exhibition motives and how they perceived their parent/guardians' motives?		Life Skill Development	Nominal	Frequencies Percentages

(Table 3.3 continued)

Research Question	Independent Variable	Dependent Variable	Scale of Measurement	Analysis
RQ6: To what extent could youth exhibitors' livestock exhibition motives (i.e., competition (aka winning shows) and learning (aka, developing life skills, making money, learning livestock skills)) be predicted based on youths' livestock exhibition experiences (i.e., youth-adult interactions, view of competition, the extent adults served as sources of livestock knowledge, youth perceptions of parent/guardians' livestock exhibition motives)?	Parent_BHAV SJ_BHAV PM_CorL	YM_CorL	Categorical	Discriminant Analysis

Note. Parent_BHAV = Parent's Behavior; SJ_BHAV = Show Jock's Behavior; PM_CorL = Parent Motive, Competition or Learning; YM_CorL = Youth Motive, Competition or Learning.

Point biserial, Kendall's Tau or Pearson's Correlation were used to compute coefficients for relationships. Using the statistical tests described in Table 3.4, the relationships were then described. Descriptions of relationships were described using Hopkins (2000) conventions (Table 3.4).

Table 3.4 *Conventions for Relationships (Hopkins, 2000)*

Relationship Coefficient (r)	Convention
0.0-0.1	Trivial
0.1-0.3	Low
0.3-0.5	Moderate
0.5-0.7	High
0.7-0.9	Very Large
0.9-1.0	Nearly Perfect

Note. Relationships were reported as positive or negative.

The level of significance was set at a *priori* of $p = .05$. In order to determine practical significance, effect sizes were utilized. Effect sizes with a medium or large effect size were classified as practically significant. Cohen's R^2 and conventions were used to compute and describe effect sizes of relationships as shown in Table 3.5.

Table 3.5 *Conventions for Effect Sizes of Relationships (Cohen, 1988)*

Effect Size Coefficient (r^2)	Convention
0.01-0.08	Small
0.09-0.24	Medium
≥ 0.25	Large

CHAPTER 4. RESULTS

4.1 Introduction

The findings of this study will be presented in this chapter. Data were analyzed using SPSS version 23 for Windows. Findings from this study were organized by first presenting the demographic characteristics of the participants. The remaining sections of the chapter were organized by presenting the findings for each of the six research questions.

4.2 Purpose of the Study

The purpose of this study was to describe and explain factors that predict youth livestock exhibitors' perceptions of life skill development informed by their livestock exhibition experiences, youth-adult interactions regarding livestock knowledge, views of competition, and livestock exhibition motives.

4.3 Research Questions

- 1 What were youth exhibitors' livestock exhibition experiences (i.e., number of years participating with different species, number of species shown, level of success, type of livestock shown, number of shows, level of shows)?
- 2 Which adults (i.e., parent/guardian, show jock, 4-H volunteer), according to the youths' perceptions, served as sources of livestock knowledge and modeled positive behaviors regarding livestock exhibition?

- 3 What were youth exhibitors' views of competition, the extent adults served as sources of livestock knowledge, and perceptions of livestock exhibition motives (i.e., youth perception, youth's perception of parent/guardian)?
- 4 To what extent did youth perceive the development of life skills through their livestock project?
- 5 To what extent was there an agreement of youth's livestock exhibition motives and how they perceived their parent/guardians' motives?
- 6 To what extent could youth exhibitors' livestock exhibition motives (i.e., competition (aka winning shows) and learning (aka, developing life skills, making money, learning livestock skills) be predicted based on youths' livestock exhibition experiences (i.e., youth-adult interactions, view of competition, the extent adults served as sources of livestock knowledge, youth perceptions of parent/guardians' livestock exhibition motives)?

4.4 Demographic Characteristics of Participants

The following section presents the demographic characteristics of the study's participants. Of the 159 total students who met the study criteria (enrolled in a high school agricultural education course, were a member of 4-H, and exhibited a livestock (i.e., beef, sheep, goat or swine) project); 96 (60.4%) of the participants were male, and 63 (39.6%) were female. Nineteen (11.9%) of the participants attended High School #1, 17 (10.7%) attended High School #2, 24 (15.1%) attended High School #3, 41 (25.8%) attended High School #4, and 58 (36.5%) attended High School #5. Thirty-eight (23.9%) of the 159 participants were in the 12th grade and 35 (22.0%) of the participants were in

the 9th grade (Table 4.1). The mean age of the participants was 15 years old ($SD = 1.84$) and the mean number of years in 4-H was 6.72 ($SD = 2.19$).

Table 4.1 *Demographic Characteristics of Participants*

Category	Response Options	<i>f</i>	%	<i>M(SD)</i>
Age				15.0 (1.84)
Years in 4-H				6.72 (2.19)
Gender				
	Male	96	60.4%	
	Female	63	39.6%	
School				
	High School #1	19	11.9%	
	High School #2	17	10.7%	
	High School #3	24	15.1%	
	High School #4	41	25.8%	
	High School #5	58	36.5%	
Grade				
	7 th Grade	20	12.6%	
	8 th Grade	24	15.1%	
	9 th Grade	38	23.9%	
	10 th Grade	19	11.9%	
	11 th Grade	23	14.5%	
	12 th Grade	35	22.0%	

Note. $N = 159$ for all categories.

4.5 Results for Research Question 1

Research Question 1: *What were youth exhibitor's livestock exhibition experiences (i.e., number of years participating with different species, number of species shown, level of success, type of livestock shown, number of shows, level of shows)?*

4.5.1 Youth Livestock Exhibition Experiences

The Youth Livestock Exhibition Experiences Survey contained seven items regarding youth livestock exhibitor's exhibition experiences. Participants' based their responses to items that allowed them to reflect on their exhibition experiences with their livestock species. Participants were asked to indicate the number of years they had shown each of the four livestock species and which specie they showed the most in the last 12 months. Participants had exhibited swine an average of 3.64 years, sheep 1.89 years, beef 1.77 years and goats 1.06 years. Seventy-five (47.2%) of the 159 participants indicated that they have shown swine the most in the last twelve months over the other three species, 38 (23.9%) of the participants had shown beef the most in the last 12 months, 27 (17.0%) of the participants had shown sheep the most in the last 12 months, and 19 (11.9%) of the participants indicated that they had shown a goat the most in the last 12 months (Table 4.2).

Table 4.2 *Years Showing Livestock Species and Species Shown the Most*

Species	<i>M</i> (years)	<i>SD</i>	<i>f</i>	%
Beef	1.77	2.96	38	23.9%
Goat	1.06	2.34	19	11.9%
Sheep	1.89	2.95	27	17.0%
Swine	3.64	3.45	75	47.2%
Total			159	100%

Based on the one species the participants showed the most in the last 12 months, participants were asked to indicate the number of shows they have exhibited their

livestock species in the last 12 months. Fifty-six (35.2%) of the participants only showed at one show, 27 (17.0%) of the participants showed at two shows, 24 (15.1%) of the participants showed at three shows, and 52 (32.7%) indicated they had shown their livestock species at four or more shows in the last twelve months (Table 4.3).

Table 4.3 *Number of Shows Attended in the Last 12 Months*

Number of Shows	<i>f</i>	%
One Show	56	35.2%
Two Shows	27	17.0%
Three Shows	24	15.1%
Four or more Shows	52	32.7%
Total	159	100%

Based on the one species participants showed the most in the last 12 months, participants indicated where they had shown their livestock species over that same time period. Participants could check all levels of shows in which they participated in the last 12 months. Of the 159 participants, 158 (99.4%) indicated they had shown at the county fair. Fifty-three (33.3%) had shown at the state level. Seventy-five (47.2%) exhibited their animal at an open show and 33 (20.8%) had shown at a national show (Table 4.4).

Table 4.4 *Type of Show Frequency for All Participants for the Species Showed the Most in the Past 12 Months*

Show	<i>f</i>	%
County Fair	158	99.4%
State Fair	53	33.3%
Open Show	75	47.2%
National Show	33	20.8%

Note. Participants were asked to select all answers that apply to their experiences.

Regarding the species participants showed the most in the past 12 months, 27% of all participants indicated they showed a market animal. Twenty-three (14.5%) indicated they showed breeding animals. Ninety (56.6%) participants showed both market and breeding animals and three (1.9%) participants indicated that they don't know the difference between a market animal and a breeding animal (Table 4.5).

Table 4.5 *Frequencies and Percentages of Type of Animal Shown for Species Showed the Most in the Past 12 Months*

Type of Animal	<i>f</i>	%
Market Animal	43	27.0%
Breeding Stock	23	14.5%
Both	90	56.6%
I Don't Know the Difference	3	1.9%
Total	159	100%

When asked where participants bought their livestock species for show, 92 (57.9%) of the participants indicated that they don't "buy" their show animals, but raise their own. Ninety-one (57.2%) of the participants also indicated that they buy their show animals from other livestock producers, and 43 (27.0%) obtain their show animals from a show jock (Table 4.6).

Table 4.6 *Frequencies and Percentages of Livestock Source*

Source	<i>f</i>	%
Raise Own	92	57.9%
Other Livestock Producers	91	57.2%
Show Jock	43	27.0%

Note. Participants were asked to select all answers that apply to their experiences.

All of the participants indicated that they showed at the county fair and 66 (41.5%) of the 159 participants indicated that they received the honor of Grand Champion Overall/Reserve Grand Champion Overall or a Top 5 Overall placing for the species they showed the most in the last 12 months. Forty-eight (30.2%) of the participants received Breed Champion or Reserve Champion honors at the county level. Twenty-one (15.1%) of the participants have been class winners at the county fair and 24 (15.1%) have placed second place or lower.

Eighty-three (52.2%) of the participants showed at an open show during their livestock exhibition career, where 23 (14.5%) of those open show participants received Grand Champion Honors. Sixty-six (41.5%) of participants had received Grand Champion honors at the county fair. Seventy-two (45.3%) of the participants indicated

that they showed at the state fair during their livestock exhibition career, however, only 11 (6.9%) had received Grand Champion Honors. Of the 48 (30.2%) participants that showed at a national show, only 10 (6.3%) had received Grand Champion Honors.

Table 4.7 *Frequencies and Percentages of Achievement Levels at Each Show*

	County Fair <i>f</i> (%)	Open Show <i>f</i> (%)	State Fair <i>f</i> (%)	National Show <i>f</i> (%)
Grand Champion Overall/Reserve Grand Champion Overall (including Top 5 Honors)	66 (41.5%)	23 (14.5%)	11 (6.9%)	10 (6.3%)
Breed/Champion Reserve	48 (30.2%)	28 (17.6%)	17 (10.7%)	8 (5.0%)
Class Winner	21 (13.2%)	19 (11.9%)	20 (12.6%)	10 (6.3%)
Second Place or Lower	24 (15.1%)	13 (8.2%)	24 (15.1%)	20 (12.6%)
Total	159 (100%)	83 (52.2%)	72 (45.3%)	48 (30.2%)

Note. Participants' indications of which shows they had exhibited during their livestock exhibition career resulted in a different (*N*) for each level of show.

When asked if the participants' parent/guardian showed livestock as a youth, 104 (65.4%) indicated that their parents/guardians showed livestock as a youth. Forty-three (27.0%) of the participant's parent/guardian did not show, and 12 (7.5%) of the participants indicated that they did not know if their parents showed livestock as a youth (Table 4.8).

Table 4.8 *Frequency of Participant's Parents as Livestock Exhibitors*

Did parent show?	<i>f</i>	%
Yes	104	65.4%
No	43	27.0%
I Don't Know	12	7.5%
Total	159	100%

4.6 Results for Research Question 2

Research Question 2: *Which adults (i.e., parent/guardian, show jock, 4-H Volunteer), according to the youths' perceptions, served as sources of livestock knowledge and modeled positive behaviors regarding livestock exhibition?*

4.6.1 Sources of Livestock Knowledge

The Youth Livestock Exhibition Experiences Survey contained items regarding which adults (i.e., parent/guardian, show jock, 4-H volunteer) served as sources of livestock knowledge according to the youth's perceptions. Participants' responded to 13 items by indicating which adult was the primary source of teaching them each skill (Table 4.9). One hundred thirty-four (84.3%) of the 159 participants indicated they discussed the cost of raising their animal with their parent, 12 (7.5%) discussed the cost of raising their animal with their show jock, four (2.5%) discussed the cost of raising their animal with their 4-H Volunteer and nine (5.7%) did not discuss the cost of raising an animal. Twenty-one (13.3%) of the participants did not discuss withdrawal periods of medication with an adult, however, 95 (60.1%) participants discussed withdrawal periods

with their parent/guardian. Ninety-three (58.9%) of the participants discussed the common types of feedstuffs fed to their animal with their parent, 34 (21.5%) discussed feedstuffs with their show jock, 16 (10.1%) discussed feedstuffs with their 4-H Volunteer, and 15 (9.5%) did not discuss common feedstuffs for livestock animals. Of the 13 livestock skills, participants' mean score for a parent/guardian as a source of knowledge was 8.21 ($SD = 4.46$). Participants' mean score for a show jock as a source of knowledge was 2.50 ($SD = 3.58$). Finally, participants' reported the 4-H Volunteer as being the least source of knowledge when it came to learning livestock skills and gaining knowledge about their project ($M = 0.94$, $SD = 2.11$).

Table 4.9 Sources of Livestock Knowledge Across Adult Role

Item	Parent/ Guardian <i>f</i> (%)	Show Jock <i>f</i> (%)	4-H Volunteer <i>f</i> (%)	Did Not Discuss <i>f</i> (%)
1. Explain the steps to properly groom my animal in preparation for a show.	106 (66.7%)	39 (24.5%)	10 (6.3%)	4 (2.5%)
2. Identify the optimal environmental conditions (e.g., climate, bio-security, temperature, etc.) for my animal.	100 (62.9%)	27 (17.0%)	10 (6.3%)	22 (13.8%)
3. Identify facilities needed to house and care for my animal safely and efficiently.	118 (74.2%)	24 (15.1%)	9 (5.7%)	8 (5.0%)
4. Choose an animal that would be successful in the show ring.	102 (64.2%)	39 (24.7%)	9 (5.7%)	8 (5.1%)
5. Explain the purpose and benefits of feed additives (e.g., fat, minerals, rolled oats, Paylean, Optaflexx, etc.)	95 (60.5%)	42 (26.8%)	9 (5.7%)	11 (7.0%)
6. Determine the common types of feedstuffs (e.g., corn, soybeans, hay, forage, etc.) and the roles they play in my animal diet.	93 (58.9%)	34 (21.5%)	16 (10.1%)	15 (9.5%)
7. Know the proper dosages (cc) of medications to give my sick animal.	93 (58.9%)	35 (22.2%)	15 (9.5%)	15 (9.5%)
8. Know the withdrawal periods (days) of medications I administer to my animal.	95 (60.1%)	30 (19.0%)	12 (7.6%)	21 (13.3%)
9. Discuss the cost of raising my animal (e.g., cost of animal, feed, supplies, etc.).	134 (84.3%)	12 (7.5%)	4 (2.5%)	9 (5.7%)
10. Define and describe the estrous (heat) cycles of my breeding animal.	95 (59.7%)	19 (11.9%)	13 (8.2%)	32 (20.1%)

(Table 4.9 continued)

Item	Parent/ Guardian <i>f</i> (%)	Show Jock <i>f</i> (%)	4-H Volunteer <i>f</i> (%)	Did Not Discuss <i>f</i> (%)
11. Compare and contrast different reproductive technologies (e.g., embryo transfer, artificial insemination) and predict which would be most successful for my animal.	87 (54.7%)	21 (13.2%)	9 (5.7%)	42 (26.4%)
12. Identify common diseases, parasites, and illnesses that affect my animal and know how to detect them.	96 (60.4%)	25 (15.7%)	20 (12.6%)	18 (11.3%)
13. How to best present my animal to the judge in the show ring.	92 (57.9%)	51 (32.1%)	13 (8.2%)	3 (1.9%)
Grand Mean (<i>SD</i>)	8.21 (4.46)	2.50 (3.58)	0.94 (2.11)	

4.6.2 Adult Behaviors

The Youth Livestock Exhibition Experiences Survey contained three sections (i.e., parent/guardian behaviors, show jock behaviors and 4-H Volunteer behaviors) with six items in each section. Students' responses on how often the adult mentor modeled positive behaviors was based on a 5-point rating scale: 1 = *Not at All*, 2 = *A Little*, 3 = *Sometimes*, 4 = *Quite a Bit*, and 5 = *Yes, Definitely*. Medians were calculated for each of the six items in each section as well as the grand mean and standard deviation of all items. Table 4.10 contains the adult behavior medians along with the grand means and standard deviations.

Participants reported that their parent/guardian “gets upset with them when they don’t perform well with their livestock” a little (*Mdn* = 1). Participants also indicated that their parent/guardian modeled highly positive behaviors by indicating “quite a bit” to

items two through four (proud of me when I don't do well, $Mdn = 4$; relationship improved, $Mdn = 4$; good conversations, $Mdn = 4$) and "not at all" to items five and six (controlling and manipulative, $Mdn = 1$; encouraged something morally wrong, $Mdn = 1$). The grand mean indicated that participant's parent/guardian modeled positive behaviors during livestock exhibition "quite a bit" ($M = 4.08$, $SD = 0.61$).

Participants reported that their show jock "never" gets upset with them when they don't perform well with their livestock ($Mdn = 1$) and "sometimes" is proud of them when they don't do well with their livestock ($Mdn = 3$). Participants also indicated that their show jock modeled highly positive behaviors by indicating "quite a bit" to items three and four (relationship improved, $Mdn = 4$; good conversations, $Mdn = 4$) and "not at all" to items five and six (is controlling and manipulative, $Mdn = 1$; encouraged something morally wrong, $Mdn = 1$). The grand mean indicated that participant's show jock modeled positive behaviors during livestock exhibition "quite a bit" ($M=4.01$, $SD=0.59$).

Participants reported that their 4-H Volunteer modeled highly positive behaviors by indicating "quite a bit" to items two through four (proud of me when I don't do well, $Mdn = 4$; relationship improved, $Mdn = 4$; good conversations, $Mdn = 4$) and "not at all" to items one, five and six (gets upset with me when I don't do well, $Mdn = 1$; controlling and manipulative, $Mdn = 1$; encouraged something morally wrong, $Mdn = 1$). The grand mean indicated that participant's 4-H Volunteer modeled positive behaviors during livestock exhibition "quite a bit" ($M = 4.09$, $SD = 0.60$).

Table 4.10 *Type of Adult Behavior Across Adult Role*

My (parent/guardian, show jock, 4-H volunteer).....	Median		
	Parent/ Guardian (N = 159)	Show Jock (N = 97)	4-H Volunteer (N = 74)
1. gets upset with me when I don't perform well with my livestock.*	2	1	1
2. is proud of me when I don't do well in the show ring.	4	3	4
3. relationship has improved.	4	4	4
4. and I had good conversations when showing livestock.	4	4	4
5. is controlling and manipulative.*	1	1	1
6. encouraged me to do something morally wrong.*	1	1	1
Grand Mean (SD)	4.08 (0.61)	4.01 (0.59)	4.09 (0.60)

Note. 1 = *Not at All*, 2 = *A Little*, 3 = *Sometimes*, 4 = *Quite a Bit*, 5 = *Yes, Definitely*.

*Items were reverse coded in the Grand Mean (SD) analysis only.

4.7 Results for Research Question 3

Research Question 3: *What were youth exhibitors' views of competition and perceptions of livestock exhibition motives (i.e., youth perception, youth's perception of parent/guardian)?*

4.7.1 Views of Competition

The Youth Exhibition Experiences Survey measured participants' perceptions of competition based on their involvement with their livestock project. Participants' responses on their perception of competition was based on a 4-point rating scale: 1 = *Strongly Disagree*, 2 = *Disagree*, 3 = *Agree*, and 4 = *Strongly Agree*. Frequencies and

percentages were reported for each item as well as a grand mean and standard deviation of all items. One hundred and four (65.4%) participants “strongly agreed” that competition in livestock exhibition motivates them to strive for excellence and ninety-seven (61.0%) “strongly agreed” that competition allows them to set goals in livestock exhibition (Table 4.11). None of the participants indicated that competition was not beneficial to their positive development and that they disliked competition. Eighty-seven (54.7%) participants indicated that they were happy for others that win and 92 (58.2%) participants agreed that competition provides them with better learning experiences. The grand mean indicated that participants “agreed” to the items regarding competition in livestock projects ($M = 3.17$, $SD = 0.32$).

Table 4.11 *Frequencies and Percentages of Participants' Perceptions of Competition in Livestock Exhibition*

Items:	Strongly Disagree <i>f</i> (%)	Disagree <i>f</i> (%)	Agree <i>f</i> (%)	Strongly Agree <i>f</i> (%)
1. Competition is beneficial to my positive development.	0 (0%)	5 (3.1%)	78 (49.1%)	76 (47.8%)
2. Livestock exhibition places too much emphasis on competition.*	18 (11.4%)	75 (47.2%)	59 (37.3%)	6 (3.8%)
3. Competition provides me with better learning experiences.	1 (0.6%)	9 (5.7%)	56 (35.4%)	92 (58.2%)
4. Competition encourages cheating.*	54 (34.6%)	47 (30.1%)	40 (25.6%)	15 (9.6%)
5. Competition is an incentive to participate in livestock exhibition.	8 (5.1%)	31 (19.9%)	82 (52.6%)	35 (22.4%)
6. Competition promotes aggressive behaviors.*	47 (29.9%)	71 (45.2%)	31 (19.7%)	8 (5.1%)
7. Competition motivates me to strive for excellence.	2 (1.3%)	7 (4.4%)	46 (28.9%)	104 (65.4%)
8. Livestock shows lead to unethical practices.*	48 (38.2%)	68 (42.8%)	27 (17.0%)	16 (10.1%)
9. I like competition.	0 (0%)	7 (4.4%)	55 (34.6%)	97 (61.0%)
10. Competitive livestock shows lead to unhealthy characteristics.*	41 (25.8%)	76 (47.8%)	36 (22.6%)	6 (3.8%)
11. Competition enhances social and family relationships.	4 (2.5%)	21 (13.4%)	73 (46.5%)	59 (37.6%)
12. Competition encourages improper parental attitudes.*	43 (27.2%)	70 (44.3%)	39 (24.7%)	6 (3.8%)
13. I often try to outperform others.	6 (3.8%)	33 (20.8%)	73 (45.9%)	46 (28.9%)
14. Competition in livestock shows requires too much help from my parents.*	41 (25.8%)	94 (59.1%)	22 (13.8%)	2 (1.3%)
15. Competition helps me set goals.	0 (0%)	6 (3.8%)	56 (35.2%)	97 (61.0%)
16. Livestock exhibitors are considered losers if they do not win.*	73 (46.2%)	64 (40.5%)	13 (18.2%)	8 (5.1%)
17. I am happy for those that win.	6 (3.8%)	15 (9.4%)	87 (54.7%)	51 (32.1%)
18. The competitiveness of livestock exhibition decreases my motivation to do well.*	72 (45.3%)	60 (37.7%)	18 (11.3%)	9 (5.7%)
Grand Mean (SD): 3.17 (0.32)				

Note. *Items were reverse coded in the Grand Mean (SD) analysis only.

4.7.2 Livestock Exhibition Motives

The Youth Livestock Exhibition Experiences Survey contained two items that asked participants to rank (e.g., first, second, third and fourth) the reasons why they show livestock and to rank (e.g., first, second, third and fourth) the reasons why they think their parent/guardian wanted them to show livestock. The reasons or motives included: developing life skills, making money, learning livestock skills and winning shows.

Participants' responses to their personal rankings are depicted in Table 4.12. Ninety-two (57.9%) of the participants indicated that developing life skills was their number one motivator, whereas only 11 (6.9%) were most motivated by making money. Forty-one (25.8%) participants indicated that learning livestock skills was their number one motivator and 15 (9.4%) indicated the number one reason they showed livestock was to win shows.

Table 4.12 *Frequencies of Youth's Livestock Exhibition Motive Rankings*

Motive	1 <i>f</i> (%)	2 <i>f</i> (%)	3 <i>f</i> (%)	4 <i>f</i> (%)
Life Skills	92 (57.9%)	39 (24.5%)	18 (11.3%)	10 (6.3%)
Making Money	11 (6.9%)	23 (14.5%)	50 (31.4%)	75 (47.2%)
Livestock Skills	41 (25.8%)	74 (46.5%)	31 (19.5%)	13 (8.2%)
Winning Shows	15 (9.4%)	23 (14.5%)	60 (37.7%)	61 (38.4%)

Note. 1 = first (ranking), 2 = second (ranking), 3 = third (ranking), 4 = fourth (ranking)

Participants' responses to their perceptions of why they think their parent/guardian wants them to show livestock are depicted in Table 4.13. One hundred and eight (68.8%) of the participants thought the main reason their parent/guardian

wanted them to show livestock was to develop life skills. Thirteen (8.3%) thought it was to make money and 28 (17.8%) thought it was to learn livestock skills. Conversely, only eight (5.1%) of the participants thought the reason their parents wanted them to show livestock was to win shows.

Table 4.13 *Frequencies of Youth's Perceptions of Parent/Guardians Rankings*

Motive	1 <i>f</i> (%)	2 <i>f</i> (%)	3 <i>f</i> (%)	4 <i>f</i> (%)
Life Skills	108 (68.8%)	33 (21.0%)	6 (3.8%)	10 (6.4%)
Making Money	13 (8.3%)	10 (6.4%)	55 (35.0%)	79 (50.3%)
Livestock Skills	28 (17.8%)	95 (60.5%)	27 (17.2%)	7 (4.5%)
Winning Shows	8 (5.1%)	19 (12.1%)	69 (43.9%)	61 (38.9%)

Note. 1 = first (ranking), 2 = second (ranking), 3 = third (ranking), 4 = fourth (ranking)

4.8 Results for Research Question 4

Research Question 4: *To what extent did youth perceive the development of life skills through their livestock project?*

4.8.1 Development of Life Skills

The Youth Exhibition Experiences Survey measured participants' perceptions of life skill development based on their involvement with their livestock projects.

Participants' responses on their perception of competition were based on a 5-point rating scale: 1 = *Not At All*, 2 = *A Little*, 3 = *Sometimes*, 4 = *Quite A Bit*, and 5 = *Yes*,

Definitely. Frequencies and percentages were reported for each item as well as a grand mean and standard deviation of all items (Table 4.14). Seventy-nine (50.0%) of the

participants revealed that their emotions affect how they perform in their livestock project and that they learned ways of solving a problem in their livestock project. Ninety-six (60.8%) of the 159 participants agreed that they definitely set goals for themselves in their livestock project and 91 (57.6%) of the participants learned ways of achieving their goals for their livestock project. Fifty-six (35.7%) of the participants revealed that their livestock project opened up job and career opportunities for them and 21 (13.4%) of participants revealed that their livestock project did not open up job and career opportunities for them. The grand mean indicated that participants have developed life skills “quite a bit” when it came to their livestock project ($M = 4.06$, $SD = 0.76$).

Table 4.14 *Frequencies and Percentages of Life Skill Development Among Livestock Exhibitors*

Through Livestock Exhibition I...	Not At All <i>f</i> (%)	A Little <i>f</i> (%)	Sometimes <i>f</i> (%)	Quite A Bit <i>f</i> (%)	Yes Definitely <i>f</i> (%)
1. Set goals for myself.	2 (1.3%)	0 (0%)	14 (8.9%)	46 (29.1%)	96 (60.8%)
2. Learned to find new ways to achieve my goals.	1 (0.6%)	0 (0%)	22 (13.9%)	44 (27.8%)	91 (57.6%)
3. Put all of my energy into this activity.	3 (1.9%)	8 (5.1%)	41 (25.9%)	53 (33.5%)	53 (33.5%)
4. Learned to push myself.	2 (1.3%)	3 (1.9%)	18 (11.5%)	51 (32.7%)	82 (52.6%)
5. Learned to focus my attention.	2 (1.3%)	7 (4.5%)	25 (15.9%)	54 (34.4%)	69 (43.9%)
6. Learned about organizing time and not procrastinating.	5 (3.2%)	14 (18.9%)	25 (15.8%)	40 (25.3%)	74 (46.8%)
7. Learned about setting priorities.	2 (1.3%)	7 (4.4%)	25 (15.8%)	45 (28.5%)	78 (49.4%)
8. Practiced self-discipline.	7 (4.4%)	7 (4.4%)	31 (19.6%)	45 (28.5%)	68 (43.0%)
9. Learned about controlling my temper.	8 (5.1%)	9 (5.7%)	30 (19.1%)	46 (29.3%)	64 (40.8%)
10. Became better at handling stress.	9 (5.7%)	13 (8.3%)	30 (19.1%)	50 (31.8%)	55 (35.0%)
11. Learned that my emotions effect how I perform.	5 (3.2%)	13 (8.2%)	26 (16.5%)	35 (22.2%)	79 (50.0%)
12. Made friends with someone of the opposite gender.	4 (2.5%)	1 (0.6%)	15 (9.5%)	25 (15.8%)	113 (71.5%)
13. Learned I had a lot in common with people of other backgrounds.	7 (4.5%)	6 (3.8%)	24 (15.3%)	49 (31.2%)	71 (45.2%)
14. Others counted on me.	7 (4.5%)	8 (5.1%)	35 (22.4%)	43 (27.6%)	63 (40.4%)
15. Had an opportunity to be in charge of another group of peers.	17 (10.8%)	16 (10.1%)	40 (25.3%)	32 (20.3%)	53 (33.5%)
16. Livestock exhibition opened up job or career opportunities for me.	21 (13.4%)	23 (14.6%)	36 (22.9%)	21 (13.4%)	56 (35.7%)
17. Livestock exhibition helped me prepare for college.	13 (8.3%)	18 (11.5%)	35 (22.3%)	35 (22.3%)	56 (35.7%)

(Table 4.14 continued)

Through Livestock Exhibition I...	Not At All <i>f</i> (%)	A Little <i>f</i> (%)	Sometimes <i>f</i> (%)	Quite A Bit <i>f</i> (%)	Yes Definitely <i>f</i> (%)
18. Learned about developing plans for solving a problem.	3 (1.9%)	13 (8.2%)	24 (15.2%)	39 (24.7%)	79 (50.0%)
Grand Mean (SD): 4.06 (0.76)					

4.9 Results for Research Question 5

Research Question 5: *To what extent was there an agreement of youth's livestock exhibition motives and how they perceived their parent/guardian's motives?*

4.9.1 Agreement of Livestock Exhibition Motives

The final section of the Youth Livestock Exhibition Experiences Survey asked participants to rank their motives, or reasons, for exhibiting livestock by ranking (i.e., first, second, third, fourth) each motive. Participants were then asked to rank the same motives, but on how they perceived their parent/guardians' motives. The livestock exhibition motives included: developing life skills, making money, learning livestock skills and winning shows. Rankings were then grouped into Group 1 or Group 2, where Group 1 = Competition as the main motive and Group 2 = Learning as the main motive. Those participants who classified "winning shows" and "making money" as first were considered Group 1 (competition) and those who classified "developing life skills" and "learning livestock skills" first were considered Group 2 (learning). Frequencies and percentages were used to describe the agreement between youth's livestock exhibition motives and how they perceived their parent/guardians' motives.

Table 4.15 displays the frequency of agreement and disagreement between youths' livestock exhibition motives and youth's perceptions of their parents' motives. Only nine (34.6%) of the participants displayed an agreement that competition was the main motive between their motive and their perception of their parents' motives. Whereas, 119 (90.8%) of the participants showed an agreement between their motive and their parents' motive that learning was the main motive.

Table 4.15 *Frequency of Agreement between Youth's Motive and Youth's Perception of Parent/Guardian's Motive*

Agreement vs. Disagreement	F (%)
Agreement: Competition	9 (34.6%)
Disagreement: YM- Competition/PM- Learning	17 (65.4%)
Agreement: Learning	119 (90.8%)
Disagreement: YM- Learning/PM- Competition	12 (9.2%)

Note. YM = Youth Motive and PM = Parent Motive

4.10 Results for Research Question 6

Research Question 6: *To what extent could youth exhibitors' livestock exhibition motives (i.e., competition (aka winning shows) and learning (aka, developing life skills, making money, learning livestock skills)) be predicted based on youths' livestock exhibition experiences (i.e., youth-adult interactions, view of competition, the extent adults served as sources of livestock knowledge, youth perceptions of parent/guardians' livestock exhibition motives)?*

4.10.1 Pearson's Correlation Among Variables

Pearson's correlation coefficients were used to describe the relationships among parent/guardian's behavior, show jock behavior, competition, parent/guardian as a source of livestock knowledge, show jock as a source of livestock knowledge, parent/guardian motive (competition or learning), life skills, and youth's motive (competition or learning). To measure effect sizes, Cohen's (1988) conventions were used and Hopkins

(1997) conventions were used to measure strength of relationships. An effect size (r^2) that is less than 0.08 is considered small, an r^2 between 0.09-0.24 is considered medium and an r^2 greater than 0.25 is noted as a large effect size. Practically significant effects are evidenced by effect sizes of .09 (medium) or larger. The strength of a relationship (r) is assessed on a scale of trivial (.00-.10), low (.11-.30), moderate (.31-.50), high (.51-.70), very large (.71-.90) and nearly perfect (.91-1.00).

There were relationships among the variables (Table 4.16). Parent behavior showed a positive high relationship ($r = 0.51$) with show jock behavior, with a large effect size ($r^2 = 0.26$). Therefore, as parent's behavior was more positive, the more positive behavior the show jock displayed. Competition had a positive moderate relationship ($r = 0.48$) with life skills, with a medium effect size ($r^2 = 0.23$). In other words, as youth perceived competition to be positive, they learned more life skills. Show jock livestock knowledge was a negative very large relationship ($r = -0.75$) with parent/guardian livestock knowledge, with a large effect size ($r^2 = 0.56$). Therefore, the less a show jock acted as a source of livestock knowledge, the more the parent acted as a source of livestock knowledge.

Table 4.16 *Pearson Correlations Among the Independent and Dependent Variables*

Variables	1	2	3	4	5	6	7	8
1. Parent Behavior ^{1, a}	----							
2. SJ Behavior ^{1, b}	.51	----						
3. Competition ^{1, a}	.20	.26	----					
4. Parent LK ^{1, a}	.15	-.01	.04	----				
5. Show Jock LK ^{1, a}	-.05	.06	.08	-.75	----			
6. Parent Motive ^{1, c}	.21	.10	.06	-.04	-.04	----		
7. Life Skills ^{2, d}	.28	.29	.48	-.02	.15	-.01	----	
8. Youth Motive ^{2, a}	.24	.29	.20	.04	-.01	.28	.13	----

Note. SJ = Show Jock, LK = Livestock Knowledge. * $p < .05$; ^a $N = 159$, ^b $N = 97$, ^c $N = 157$, ^d $N = 158$. Item¹ = Independent Variables, Item² = Dependent Variables

4.10.2 Discriminant Analysis

An exploratory discriminant analysis was used to determine to what extent the chosen independent variables could correctly classify participants predicted livestock exhibition motives (competition or learning) and their actual exhibition motives. Three models (e.g., models including 3, 4 and 5 independent variables) were run based upon the independent variables that had the highest correlated relationships to the dependent variable. The model with four variables was chosen as the most parsimonious model with the highest level of prediction.

The canonical correlation coefficient of Test Function 1 was 0.44 and Wilks' lambda (λ) was 0.81 with four degrees of freedom (df) and was significant ($p < .01$). From an examination of the standardized canonical discriminant function coefficient, it was concluded that the most highly discriminating attributes of competition when compared with learning, was that the motive tended to be more predictable by competition, parent's motive, parent's behavior and show jock behavior.

Table 4.17 *Correlation of Predictor Variables with Discriminant Function and Standardized Canonical Discriminant Function Coefficients*

Predictor Variable	Correlation with Discriminant Function	Standardized Canonical Discriminant Function Coefficients
Parent Motive	.56	.44
Show Jock Behavior	.60	.33
Parent Behavior	.63	.31
View of Competition	.70	.51

The classification analysis for participation reported that nearly three in five respondents' livestock exhibition motives could be predicted by the following variables: 1) parent/guardians' motive, 2) show jock behavior, 3) parent/guardians behavior, and 4) view of competition. There was 76.5% accuracy in predicting participants' motive as competition and their actual livestock exhibition motive as competition. In other words, youth's motive can be accurately predicted as competition with 76.5% accuracy when knowing their view of competition, their parent and show jocks behavior and parent's motive. Additionally, there was 75.9% accuracy in predicting that participant's main motive was learning. This means that youth's motive can be accurately predicted as learning with 75.9% accuracy when knowing their view of competition, their parent and show jocks behavior and parent's motive. By using this model, 76.0% of the original grouped cases were correctly classified (Table 4.18).

Table 4.18 *Classification Analysis for Livestock Exhibition Motives*

		Predicted Group Membership			
		Competition		Learning	
Actual Group Membership	<i>n</i>	<i>n</i>	%	<i>n</i>	%
Competition	17	13	76.5	4	23.5
Learning	79	19	24.1	60	75.9

Note. 76.0% of original grouped cases correctly classified.

CHAPTER 5. CONCLUSIONS AND DISCUSSION

5.1 Introduction

This chapter will present conclusions for the research study. Additionally, implications for theory, research and practice will be discussed. Finally, recommendations for future research will be presented.

5.2 Purpose of the Study

The purpose of this study was to describe and explain factors that predict youth livestock exhibitors' perceptions of life skill development informed by their livestock exhibition experiences, youth-adult interactions regarding livestock knowledge, views of competition, and livestock exhibition motives.

5.3 Research Questions

1. What were youth exhibitors' livestock exhibition experiences (i.e., number of years participating with different species, number of species shown, level of success, type of livestock shown, number of shows, level of shows)?
2. Which adults (i.e., parent/guardian, show jock, 4-H volunteer), according to the youths' perceptions, served as sources of livestock knowledge and modeled positive behaviors regarding livestock exhibition?
3. What were youth exhibitors' views of competition, the extent adults served as sources of livestock knowledge, and perceptions of livestock exhibition motives (i.e., youth perception, youth's perception of parent/guardian)?

4. To what extent did youth perceive the development of life skills through their livestock project?
5. To what extent was there an agreement of youth's livestock exhibition motives and how they perceived their parent/guardians' motives?
6. To what extent could youth exhibitors' livestock exhibition motives (i.e., competition (aka winning shows) and learning (aka, developing life skills, making money, learning livestock skills) be predicted based on youths' livestock exhibition experiences (i.e., youth-adult interactions, view of competition, the extent adults served as sources of livestock knowledge, youth perceptions of parent/guardians' livestock exhibition motives)?

5.4 Conclusions and Discussion

There were five conclusions from the study that addressed participants' parents as a source of livestock knowledge, positive adult behaviors, competition in livestock exhibition, development of life skills and the role of livestock exhibition motives. Each conclusion is followed by a discussion regarding the contribution to the knowledge base and an interpretation related to prior research.

5.5 Conclusion 1: Parents as a Source of Livestock Knowledge

Youth participants reported their parent as their main source of livestock knowledge and skills.

5.5.1 Discussion

In examining the livestock knowledge and skills and the sources youth received those skills from, participants reported that their parent provided them with the most

knowledge when it came to learning about their livestock project. Participants revealed that their parent taught them the most skills when it came to animal stewardship (i.e., understanding optimal environmental conditions for my animal). Unfortunately, participants also reported that their show jock and/or 4-H volunteer seldom served as a source of knowledge. However, the show jock was a very common source when it came to skills regarding presenting the animal to the judge in the show ring and other exhibition skills and the 4-H volunteer was a source for exhibition rules.

Parents as a major source of livestock knowledge could be explained by the participants' demographic characteristics. A majority of the participants indicated that their parents exhibited a livestock project as a youth, and more than half of the participants also reported that they raise their own animal with their family or receive their livestock animal from another livestock producer. This finding supports Richardson (1994) who found that youth learn best through livestock projects by actually seeing activities being done by their parent and then discussing the activity. Many components of a livestock project require attention and cooperation through an adult interaction, which supports a major mission of the 4-H Organization; learning-by-doing and learning through experience alongside adults (4-H, 2015). In this study, it was evident that most participants worked with their parent or family the most in their livestock project, therefore allowing youth the opportunity to always have an adult mentor or source of knowledge close by to observe and learn from. Only a quarter of the participants in this research study worked with or got their animals from a show jock. Unlike a parental interaction, a show jock or 4-H volunteer interaction may only happen at certain times throughout the course of the livestock project in turn, affecting the knowledge and skills

youth exhibitors gain about their project. Youth indicated their parent as the “primary source” of livestock knowledge for the majority of the items on the questionnaire, however, the show jock interaction is highly evident with exhibition skills and the 4-H volunteer was a source of knowledge specifically for exhibition rules and guidelines.

A few studies were found regarding learning through livestock exhibition and how livestock skills are gained. However, those studies focused on “ways” in which youth livestock exhibitors obtain their knowledge and not “who” provided them or guided them with knowledge about their livestock project (Emo, 2008; Sawyer 1987). Therefore, this study contributed to the knowledge base in that it focused on the individuals who were providing youth livestock exhibitors with the appropriate knowledge to learn and be successful in their livestock project. The conclusion that parents are the major source of livestock knowledge and skills is also connected to previous literature regarding youth-adult interactions as a resource necessary to development (Bronfenbrenner, 1979; Jarrett, 2003). Adults are given the opportunity to serve as a mentor in a livestock project which supports Williams and Kornblum’s (1985) contention that when adults are given the opportunity to serve as a role model, youth’s academic and interpersonal skills are enhanced.

5.6 Conclusion 2: Positive Adult Behavior

Youth perceived adults modeled highly positive behaviors when working with youth in a livestock project.

5.6.1 Discussion

In examining participants' responses to their adult mentors' behaviors in a livestock project, participants revealed that their parent/guardian, show jock, and/or 4-H volunteer modeled positive behaviors "quite a bit." The current study into youth's perceptions of their adult mentor's behavior and the impact those behaviors have on youth's development of life skills is supported by previous studies (Halpern, 2005; Jarrett, Sullivan, & Watkins, 2005). According to Halpern (2005) adults play a key role in shaping youth into productive future citizens. When youth and adults come together in a favorable circumstance, a positive environment is conveyed (Jarrett et al., 2005). The youth exhibitors in the current study showed that their adult mentors displayed positive behaviors towards their actions in their livestock project, and ultimately positive life skills were generated. This finding suggests that regardless of the type of adult mentor (e.g., parent/guardian, show jock, or 4-H volunteer), those in this study are providing youth livestock exhibitors with positive behaviors and interactions that youth need in order to grow and succeed in their livestock project. Findings from this study also revealed that there was a 97% agreement between youth and youth's perception of adult's motive that life skills and learning were the main motive for livestock exhibition. This can be explained by authors who have found that adults act as a partner with a common cause in a youth-adult interaction, therefore influencing youth's values and goals (Jarrett et al., 2005; Camino & Zeldin, 2002). For example, when youth are guided by an adult that wants them to learn and gain life skills, youth can gain valuable skills needed to succeed in the future. Participants in this study also revealed that their show jock "sometimes" was proud of them when they did not do well in the show ring. This speaks

to the role that youth exhibitors can perceive show jocks' behaviors as both positive and negative when it comes to livestock exhibition (Kieth, 1997).

The conclusion that adults modeled positive behaviors toward youth in a livestock project is also supported by the ecological systems theory that was used to inform the youth-adult interaction variable of this study (Bronfenbrenner, 1992). In order to understand youth's development, environmental interactions must be taken into consideration. Participants in this study revealed that their adult mentor displayed positive behaviors regarding both their success and failure in the show ring and that the positive behaviors allowed them to improve their relationship with their adult mentor and allowed youth to have good conversations with their adult mentor. This supports a finding by Huebner and Mancini (2003) that parental, or adult relationships reflect the outcomes for youth involved in an out-of-school time activity and will predict youth's continued participation in an out-of-school time activity. The youths' perceptions of the positive adult behaviors in this study also reflect the "exosystem" of the ecological systems theory (Ryan, 2001). For example, when adults behave either positively or negatively, youth will be impacted and behave in a similar way. In this study, the positive adult behaviors impacted the life skills youth developed from participating in their livestock project and their view of competition. Because adults conveyed positive behaviors toward youth, youth viewed competition as a positive thing that helped them succeed in other ways besides winning, such as learning from competition in their livestock project. Furthermore, when youth in this study had a positive interaction with their adult mentor and when adults wanted youth to learn about their livestock project and

develop life skills, youth gained life skills and were motivated to learn and develop those skills just like their adult mentor.

5.7 Conclusion 3: Competition in Livestock Exhibition

Participants agreed that competition was a driving force behind their motivation to strive for excellence in their livestock project and viewed competition in livestock exhibition to be a positive event.

5.7.1 Discussion

Overall, participants perceived competition in livestock exhibition to be very beneficial to their projects' success. However, participants consistently reported that they often try to outperform others when it came to thinking about their view of competition with their livestock project. Participants also reported that competition in livestock exhibition provided them with better learning experiences and acted as an incentive to continue to participate in the project which supported Burguillo's (2010) finding that competition is a common motivational and teaching tool for youth involved in different competitive activities. Nearly 42% of the study's participants revealed that they had received Grand Champion Honors at the county fair with their livestock. Because the youth in this study were successful in the show ring, their view of competition was positive. Competition in a livestock project is something that is desired according to Davis (1998). He found that exhibitors enjoyed the aspect of competition and that they believed the lessons they learned through competition were very beneficial to their development. This supports the finding of this study that participants perceive

competition to be a positive thing, but are motivated I livestock exhibition to gain livestock and life skills.

Livestock exhibitors acquire sportsmanship abilities in the livestock show ring which can shape how they see competition and how they react to competition (Davis 1998; Rusk et al., 2003). In this study, participants indicated that they were happy for those that win and that competition enhanced their social relationships with others involved in livestock projects. The idea that competition enhances social relationships is supported by Rusk et al. (2003) who suggested that competitive livestock projects should be about fun and the friendships that are made. The majority of the participants in the current study also revealed that exhibitors are not considered a “loser” if they do not win in livestock exhibition. Livestock exhibition is special in that it is one exhibitor versus many others in the competition. It is important for exhibitors to accept when they don't win, but to be humble and happy for others when they do win (Davis, 1998).

This findings of this study also contradicts several recent studies that view competition as a negative factor of a livestock project (Kieth, 2007; Radhakrishna et al., 2006). These researchers found that competition in livestock exhibition can lead to unethical or unhealthy characteristics and that parental involvement in a livestock project can create improper attitudes and poor sportsmanship values. However, the majority of participants in this study indicated that competition in livestock exhibition does not lead to unethical practices and does not promote aggressive behaviors. Participants believed competition to be a positive thing and that it helps them to strive for excellence and achieve their goals.

5.8 Conclusion 4: Development of Life Skills

Youth livestock exhibitors agreed they gained life skills through their engagement in a livestock project.

5.8.1 Discussion

As seen from the results of the study, youth livestock exhibitors agreed that they gained life skills through participating in their livestock project. The large majority of participants not only believed that livestock exhibition allowed them to push themselves and set goals, but participants also indicated that they became better at handling stress and controlling their temper through participation with their livestock project. The significant role that livestock exhibition plays in the development of life skills for youth is important to note as research has shown that the development of life skills is important to youth development and are needed later in life (Boyd, Herring & Briers, 1992; Hendricks, 1996).

It is well known that there are many benefits that can be derived from livestock exhibition and that livestock exhibition provides youth with life skills in areas such as responsibility, decision-making and communication (Sawer, 1987; Gamon et al., 1992). The participants of this study revealed that they are no different. Participants learned that they can adjust to their environment, make responsible decisions and set and achieve goals for themselves. Over 68% of participants revealed that developing life skills was their main motive for participating in their livestock project, over winning shows and learning livestock skills. This result supported Gamon et al. (1992) who found that livestock exhibitors may gain more life skills than animal science knowledge skills

through their livestock project. Not only do youth gain livestock knowledge and skills through record keeping and the activities they complete through their livestock project, but ultimately those activities teach them life skills that they will use later in life.

Finally, the conclusion that youth livestock exhibitors gained life skills through their engagement in a livestock project supports the theory of positive youth development that informed the life skills variable in this study (Lerner, 2002). Participants in this study revealed, in fact, that they did gain life skills through livestock exhibition which is a competitive event. Previous research on positive youth development through competitive events suggests that competition plays a key role in developing positive skills in the development of youth (Eccles, Barber, Stone & Hunt 2003; Lerner, 2004). Competitive events allow youth to self-evaluate themselves and to build character (Eccles et al., 2003). Positive youth development in competitive events also fosters educational and occupational outcomes for youth (Eccles et al., 2003) which supports the finding that participants were able to prepare for college and their future career through exhibiting livestock. Competitive organizations such as the 4-H Organization also utilize the five C's of positive youth development. The five C's include competence, confidence, character, connection and caring (Lerner, 2004). Competitive youth organizations result in the development of the five C's, especially when there is an interaction between a youth and an adult, skill building activities and opportunities for youth to succeed (Blum, 2003). In this study, youth interacted with adults through their competitive livestock project allowing them learn from them and develop beliefs, values and skills needed in their future.

5.9 Conclusion 5: Role of Livestock Exhibition Motives

Parents' motives and behaviors, show jock's behavior and youth's view of competition predicted youth livestock exhibitors' motives.

5.9.1 Discussion

Nearly three out of four youth livestock exhibitors' motives could be predicted by four factors: (1) parent's motive, (2) show jock's behavior, (3) parent's behavior, and (4) view of competition. Therefore, by knowing these four factors, one can correctly classify or predict youth's motive as competition or learning. For example, if the parent's is learning, the show jock and parent's behaviors are perceived as being positive, and the exhibitor has a positive view of competition, there is a 75% chance the youth's motive for exhibiting livestock will be learning. When the parent's motive is competition, the show jock and parent's behaviors are perceived as being less positive, and the youth exhibitor has a less positive view of competition, there is a 75% chance the youth will have a motive of competition.

The theory of self-regulation assumes that thoughts, feelings, actions and goals are all self-generated and that youth take their own responsibility or personal initiative for their outcomes (Zimmerman, 1994). However, this personal initiative is not a fixed characteristic of an individual, rather it is a context-specific feature that comes about when an individual wants to succeed (Zimmerman, 1989). Therefore, it was assumed that the context of livestock shows and exhibition and the interactions youth have with adult mentors encourages youth exhibitor's motives. Furthermore, the three factors included in the present study's prediction index were closely related and therefore

support youth's motives for participating in livestock exhibition. For example, the competitive nature of livestock exhibition and the behavior of an adult mentor can influence youth's desires and motivations to succeed in livestock exhibition. For some individuals, success can mean winning a blue ribbon, but for others it can be accomplishing a goal or learning more about their project to apply to a future career.

The conclusion that youth livestock exhibitors' motives could be predicted and grouped into competition or learning supports self-regulation research that has found individuals self-regulate in academic, non-academic and extension settings (Filcher & Miller, 2000; Ricketts, Carter, Place & McCoy, 2012; Chen & Singer, 1992). Furthermore, multiple similarities can be found between motivations in livestock exhibition and non-academic settings including the following: 1) each allows youth to set their own goals, 2) they both use self-regulation techniques in order to learn, and 3) in order for a skill to be mastered, individuals must apply strategies to a task within their relevant setting (Filcher & Miller, 2000; Schunk & Zimmerman, 1998).

While youth livestock exhibition motives was not informed by the theory of positive youth development, it aligned well in terms of the current study's prediction model. For example, if an individual has a positive interaction with their adult mentor (e.g., parent/guardian, show jock) through their livestock project, it is presumed that he or she would learn and develop skills to be used later in life (Mahoney & Lafferty, 2003). Therefore, positive youth development was supported by the present study in that the researcher found that the interaction youth have with their adult mentor and the adult mentor's motive was a prediction indicator for the motivations and development of life skills in livestock exhibition (4-H, 2015; Lerner, 2002).

Over half of participants in this study revealed that their main motive for participating in livestock exhibition was to develop life skills and two-thirds of youth perceived their parent's motives for their child's participation to be the development of life skills. This finding supports previous literature regarding competitive rewards and incentives, such as money and trophies (Kohn, 1992; Weber & McMullers, 1986). Rewards and incentives can work great in the short run, but can fail or cause harm in the long run, which can support the finding that most youth in this study were most interested and motivated in developing life skills and learning about their project, rather than being motivated by banners and ribbons (e.g., competition) (Kohn, 1992).

5.10 Implications for Theory and Research

Two theoretical perspectives, Positive Youth Development and Ecological Systems Theory were utilized to inform variables of this study and Self-Regulation theory was utilized in the development of this study as well as to interpret the results. Self-regulation suggests that thoughts, feelings, actions and goals are all self-generated and that youth take their own personal initiative in given tasks (Zimmerman, 1994). Positive youth development is the fundamental assumption that results in positive, enduring features in a young person's life that can be achieved through guidance, opportunities and support from caring adults (4-H, 2015; Lerner, 2002; Mahoney & Lafferty, 2003). Finally, ecological systems theory implies that a child's development lies within the context of the relationships that form an individual's environment (Bronfenbrenner, 1992). Together, these theoretical frameworks helped to shape the overall design of the study as well as to interpret the results as they related to youth's

interactions with their adult mentor, livestock exhibition motives and sources of livestock knowledge.

Results from this study suggest the important role adults play in the learning of livestock skills and the development of life skills through a livestock project. Furthermore, this study validates the school of thought on the important role adults play in youth livestock exhibition. Ecological systems theory was incorporated in this study to explore the youth-adult interactions within livestock exhibition and how those interactions effect youth's actions, motivations and beliefs. The findings of this study suggest that not only is the parent the major source of livestock knowledge for youth exhibitors, but also the behaviors of the parent influence the way youth view competition and the development of life skills. For example, a salient finding across all participants was that their adult mentors displayed positive behaviors towards youth and their performance in the show ring and additionally, life skills and knowledge were gained. This indicates that in order to understand youth's beliefs and development in a specific area of interest their environment and interactions within that environment must be taken into consideration (Bronfenbrenner, 1992).

When examining the larger picture, findings from this study indicate that youth view competition as a positive attribute to livestock exhibition. These findings support the theoretically-based premise that competitive events are associated with positive outcomes for youth (Hansen, Larson, & Dworkin, 2003). Competition allows youth to self-evaluate themselves and build character, as well as elicit positive educational or occupational outcomes for youth (Eccles et al., 2003). Therefore, it can be concluded that youth perceive positive youth development through livestock exhibition experiences.

Additionally, a majority of participants indicated that the development of life skills was their main motive in livestock exhibition. This finding suggests that participants were self-regulated and took their own initiative to learn and develop skills needed to succeed in not only livestock exhibition, but life as well. Not everyone can be a winner, which supports the finding of this study that participants were motivated to learn and develop life skills and not to win shows.

Much of the previous literature focused on livestock knowledge included where exhibitors can gain their knowledge regarding their project. This study took a different approach, however, by examining who taught them or provided them with their livestock knowledge. The findings of this study suggest that the majority of exhibitors obtain their knowledge from their parent. One important aspect to note is that this finding is a product of the environment youth interact with in their livestock project. Most of the participants in this study revealed that they interacted the most with their parent, therefore the positive environment and behaviors parents displayed toward youth affected youth's exhibition experience in a livestock project. In a livestock project, adults, especially parents, are expected to challenge youth and provide them with the knowledge and skills needed to learn and succeed in their livestock project. For livestock exhibitors who don't have a supportive, helpful environment at their home, it is important for 4-H volunteers to become a mentor and source of information for a youth livestock exhibitor. The findings of this study serve as preliminary support that can be used to further explore relationships livestock exhibitors have with their 4-H volunteer.

5.11 Implications for Practice

There are several practical implications from this study. First, Extension educators and 4-H volunteers can use the information gained from this study to improve and develop livestock species' programs and volunteer training that includes instructions and strategies on teaching youth livestock exhibitors about their project. One goal of the current study was to determine where youth livestock exhibitors gain their knowledge regarding a livestock project. Participants in this study learned the most about their livestock project through their parent, seldom from their show jock, and very little from the 4-H volunteer. However, participants in this study revealed that, on average, their 4-H volunteer taught them one out of the 13 livestock skills provided in the questionnaire. Additionally, previous research has demonstrated that project curriculum and project guidelines allow youth livestock exhibitors to learn about their livestock project (Emo, 2008). Therefore, it is important for youth Extension programs and professionals to begin utilizing their volunteers and parents in the 4-H curriculum regarding livestock projects in order to teach youth livestock exhibitors about their animal or project. As parents were a primary source of livestock knowledge for youth exhibitors in this study, increasing their role as a knowledge source could benefit youth livestock exhibitors. A training program or educational seminar for parents could allow the parent to learn more about a livestock species so they can correctly pass information on to their child. Additionally 4-H volunteers should foster an environment where youth exhibitors can come to seek guidance, help and knowledge. Developing a training program for volunteers involved with livestock projects that provides volunteers with knowledge and activities related to livestock species projects, in turn, could allow youth exhibitors to

learn from their 4-H volunteer and interact with other youth exhibitors in their species project.

Second, parents, volunteers, show jocks and Extension professionals should be aware of the relationships youth livestock exhibitors have with them, and utilize those youth-adult interactions as a tool to increase the development of life skills and positive livestock exhibition experiences for the youth. One aspect of this study was to contribute to the efforts of using youth-adult interactions to mold a positive livestock exhibition experience such as providing livestock knowledge, perceiving competition and developing life skills. Previous research revealed that interactions with adults allows adults to pass on information, values and goals to youth, ultimately directing and developing values in an area of interest (Bronfenbrenner, 1979). Additionally, positive interactions with parents and other adults can help prepare youth for competitive livestock events and shape youth to have a positive view of competition (Radhakrishna, Everhart, & Sinasky, 2006).

Third, participants indicated that developing life skills was the main motivation behind their participation in livestock exhibition. It may be beneficial for Extension professionals, 4-H volunteers, or other adults to assess youth exhibitors' beliefs and motivations by using an instrument such as the "Youth Livestock Exhibition Experiences Survey." By doing so, adults involved in youth livestock projects can evaluate knowledge areas that need to be discussed or to determine where youth exhibitors' main motives lie. Positive youth-adult interactions can direct youth's values and goals and the same can be said for youth involved in a livestock project (Jarrett, 2003; Zeldin, Christens, & Powers, 2013). Assessing the interaction youth have with their adult mentor in their livestock

project could allow adults to better understand youth exhibitor's beliefs and views of their livestock project.

5.12 Recommendations for Future Research

This study is one of the few that has focused on youth livestock exhibition experiences and views of competition and learning in a livestock project. However, this study is novel in that it explored the role of the adult in a livestock project and how adults' behaviors can impact life skills and the overall exhibition experience for youth in a livestock project. In sum, there is an opportunity for additional research to be pursued in this area. As an example, the following recommendations for future research are suggested.

1. This study focused only on the perspective of the youth livestock exhibitor. Collecting data from the parent or adult mentor's perspective on livestock exhibition experiences should be expanded upon in future studies in order to determine if adults have the same feelings or beliefs about livestock exhibition as the youth and to further explain how youth's beliefs in a livestock project are shaped.
2. Future studies should examine other areas in the state of Indiana or other states to make the results more generalizable and to determine if the findings are consistent with the findings of this study.
3. Future research would benefit from including a qualitative component. Much insight on youth livestock exhibition experiences can be gained via qualitative responses such as in depth interviews with exhibitors or a focus group approach.

4. Future research should consider the inclusion of a comparison group or matched paired study between youth exhibitors and their parent, show jock, or 4-H volunteer. This would expand upon this study by allowing multiple perspectives on the same exhibition experiences, as well as allow for more in-depth data on youth livestock exhibition experiences from both the perspectives of the youth and their adult mentor.
5. As noted by Kohn (1992), rewards and incentives in livestock exhibition work great for younger youth, but may cause harm for older youth. Future research could benefit from considering all ages of livestock exhibitors, not just high school aged youth to determine the differences in main livestock exhibition motives.
6. Agricultural classroom instruction and supervised agricultural experiences (SAE) can enhance learning in a livestock project and often times an individual's livestock project is used as an SAE and for recognition in the FFA (Bergin & Bergin, 2012; Cheek, Arrington, Carter, & Randell, 1994). Therefore, future studies should examine FFA livestock project exhibitors in order to compare the exhibition experiences of 4-H and FFA livestock project exhibitors. Such a comparison is needed because FFA livestock project exhibitors could have a greater opportunity to learn livestock project and life skills from other adults such as a teacher or career development event (CDE) coach as opposed to 4-H livestock project exhibitors.

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APPENDIX A IRB APPROVAL



HUMAN RESEARCH PROTECTION PROGRAM
INSTITUTIONAL REVIEW BOARDS

To: LEVON ESTERS
AGAD

From: JEANNIE DICLEMENTI, Chair
Social Science IRB

Date: 09/15/2016

Committee Action: **Expedited Approval for Renewal - Category(7)**

IRB Approval Date 09/15/2016

IRB Protocol # 1608018030

Renewal Version

Study Title An Exploratory Study of Youth Exhibition Experiences in Livestock Projects

Expiration Date 09/14/2017

Subjects Approved: 300

The above-referenced protocol has been approved by the Purdue IRB. This approval permits the recruitment of subjects up to the number indicated on the application and the conduct of the research as it is approved.

The IRB approved and dated consent, assent, and information form(s) for this protocol are in the Attachments section of this protocol in CoeusLite. Subjects who sign a consent form must be given a signed copy to take home with them. Information forms should not be signed.

Record Keeping: The PI is responsible for keeping all regulated documents, including IRB correspondence such as this letter, approved study documents, and signed consent forms for at least three (3) years following protocol closure for audit purposes.

Documents regulated by HIPAA, such as Authorizations, must be maintained for six (6) years. If the PI leaves Purdue during this time, a copy of the regulatory file must be left with a designated records custodian, and the identity of this custodian must be communicated to the IRB.

Change of Institutions: If the PI leaves Purdue, the study must be closed or the PI must be replaced on the study through the

Amendment process. If the PI wants to transfer the study to another institution, please contact the IRB to make arrangements for the transfer.

Changes to the approved protocol: A change to any aspect of this protocol must be approved by the IRB before it is implemented, except when necessary to eliminate apparent immediate hazards to the subject. In such situations, the IRB should be notified immediately. To request a change, submit an Amendment to the IRB through CoeusLite.

Continuing Review/Study Closure: No human subject research may be conducted without IRB approval. IRB approval for this study expires on the expiration date set out above. The study must be close or re-reviewed (aka continuing review) and approved by the IRB before the expiration date passes. Both Continuing Review and Closure may be requested through CoeusLite.

Unanticipated Problems/Adverse Events: Unanticipated problems involving risks to subjects or others, serious adverse events, and serious noncompliance with the approved protocol must be reported to the IRB immediately through CoeusLite. All other adverse events and minor protocol deviations should be reported at the time of Continuing Review.

APPENDIX B FINAL INSTRUMENT

Youth Livestock Exhibition Experiences Survey

Sponsored by the Department of Youth Development & Agricultural Education

PURDUE
UNIVERSITY**Background Information**Please **CHECK** or **WRITE** the appropriate answers to the questions below.

1. Age: _____ years
2. Gender: Male Female
3. School: _____ High School
4. Grade in School: 7th Grade
 8th Grade
 9th Grade
 10th Grade
 11th Grade
 12th Grade
5. Are you a member of 4-H? YES NO
6. How many years have you been in 4-H? _____ years
7. Did you show livestock in the last 12 months? * YES NO

If no, thank you for completing this survey.*PLEASE STOP**

8. If **yes**, please indicate the number of years of each species of livestock that you have exhibited.
- Beef: _____ years
- Goat: _____ years
- Sheep: _____ years
- Swine: _____ years
9. Based on the number of years **and** the number of shows, which species have you shown the most in the last 12 months? Species: _____

Using the species that you indicated in question # 9, answer questions 10-14

10. How many shows did you exhibit your livestock species in the last 12 months? **(check only one)**
- One Show
 Two Shows
 Three Shows
 Four + Shows
11. Where did you show your livestock species in the last 12 months? **(check all that apply)**
- County Fair
 State Fair
 Open/Jackpot Shows
 National Shows
12. What type of livestock do you exhibit? **(check only one)**
- Market Animals
 Breeding Stock
 Both
 I Don't Know the Difference
13. Where do you get your livestock species for show? **(check all that apply)**
 *A **show jock** is an expert who coaches families on how to raise and prepare a livestock animal for show.
- I Raise My Own
 Show Jock*
 Other Livestock Producers
14. For all the years you have shown, please indicate your highest level of achievement with your livestock species project. **(select the highest award won at each show)**

Show	Grand Champion Overall/Reserve Grand Champion Overall (including Top 5 honors)	Breed Champion/Reserve	Class Winner	Second Place or Lower	Have Not Shown at this Level
County Fair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open/Jackpot Show	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State Fair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National Show	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

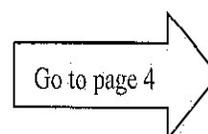
Section I

Please answer the following questions based on the livestock species you indicated in question # 9.

A **parent/guardian** is the individual (i.e., parent/guardian) you spend the most time with your livestock project. A **show jock** is an expert who coaches families on how to raise and prepare a livestock animal for show. A **4-H Volunteer** is any adult helping youth with a project that has a role within the 4-H Organization.

Instructions: Please read carefully and place a (✓) in the appropriate box to the right of each topic. **Please be honest.**

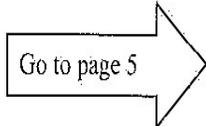
Which adult did you most discuss the following topics with? (select one adult per topic)	Parent/ Guardian	Show Jock	4-H Volunteer	Did Not Discuss
1. Explain the steps to properly groom my animal in preparation for a show.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Identify the optimal environmental conditions (e.g., climate, bio-security, temperature, etc.) for my animal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify facilities needed to house and care for my animal safely and efficiently.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Choose an animal that would be successful in the show ring.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Explain the purpose and benefits of feed additives (e.g., fat, minerals, rolled oats, Paylean, Optaflexx, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Determine the common types of feedstuffs (e.g., corn, soybeans, hay, forage, etc.) and the roles they play in my animal's diet.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Know the proper dosages (cc) of medication to give my sick animal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Know the withdrawal periods (days) of medications I administer to my animal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Discuss the cost of raising my animal (e.g., cost of animal, feed, supplies, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Define and describe the estrous (heat) cycle of my breeding animal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Compare and contrast different reproductive genetic technologies (e.g., embryo transfer, artificial insemination) and predict which would be most successful for my animal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Identify common diseases, parasites, and illnesses that affect my animal and know how to detect them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. How to best present my animal to the judge in the show ring.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Section II

Please answer the following questions based on the livestock species you indicated in question # 9.

Instructions: Please <u>CIRCLE</u> the most appropriate answer for each statement. Please be honest.				
To what extent do you agree with the following statements?	Strongly Disagree	Disagree	Agree	Strongly Agree
1. Competition in livestock events is beneficial to my positive development.	1	2	3	4
2. Livestock exhibition places too much emphasis on competition.	1	2	3	4
3. Competition in livestock events provides me with better learning experiences.	1	2	3	4
4. Competition in livestock exhibition encourages cheating.	1	2	3	4
5. Competition is an incentive for me to participate in livestock exhibition.	1	2	3	4
6. Competition in livestock shows promotes aggressive behavior.	1	2	3	4
7. Competition in livestock events motivates me to strive for excellence.	1	2	3	4
8. Livestock shows lead to unethical practices (e.g., cheating).	1	2	3	4
9. I like competition.	1	2	3	4
10. Competitive livestock shows lead to the development of unhealthy characteristics (e.g., jealousy, poor sportsmanship).	1	2	3	4
11. Competition in livestock shows enhances my social and family relationships.	1	2	3	4
12. Competition encourages improper parental attitudes toward livestock exhibition.	1	2	3	4
13. I often try to outperform others.	1	2	3	4
14. Competition in livestock shows requires too much help from my parents.	1	2	3	4
15. Competition helps me set goals.	1	2	3	4
16. Participants in livestock events are considered losers if they do not win.	1	2	3	4
17. I am happy for those that win.	1	2	3	4
18. The competitiveness of livestock exhibition decreases my motivation to do well.	1	2	3	4

Go to page 5 

Section III

Please answer the following questions based on the livestock species you indicated in question # 9.

A parent/guardian is the individual (i.e., parent/guardian) you spend the most time with your livestock project.

Instructions: Please **CIRCLE** the most appropriate answer to each statement. **Please be honest.**

To what extent does your <u>parent/guardian</u> exhibit the following behaviors?	Not At All	A Little	Sometimes	Quite A Bit	Yes, Definitely
1. My parent/guardian gets upset with me when I don't perform well with my livestock species.	1	2	3	4	5
2. My parent/guardian is proud of me when I don't do well with my livestock species in the show ring.	1	2	3	4	5
3. Showing livestock improved my relationship with my parent/guardian.	1	2	3	4	5
4. I had good conversations with my parent/guardian because of showing livestock.	1	2	3	4	5
5. My parent/guardian is controlling and manipulative when it comes to showing livestock.	1	2	3	4	5
6. My parent/guardian encouraged me to do something I believed was morally wrong.	1	2	3	4	5

Section IV

Please answer the following questions based on the livestock species you indicated in question # 9.

A show jock is an expert who coaches families on how to raise and prepare a livestock animal for show. If you did not work with a show jock, please skip this section and **continue to Section V**.

Instructions: Please **CIRCLE** the most appropriate answer to each statement. **Please be honest.**

To what extent does your <u>show jock</u> exhibit the following behaviors?	Not At All	A Little	Sometimes	Quite A Bit	Yes, Definitely
1. My show jock gets upset with me when I don't perform well with my livestock species.	1	2	3	4	5
2. My show jock is proud of me when I don't do well with my livestock species in the show ring.	1	2	3	4	5
3. Showing livestock improved my relationship with my show jock.	1	2	3	4	5
4. I had good conversations with my show jock because of showing livestock.	1	2	3	4	5
5. My show jock is controlling and manipulative when it comes to showing livestock.	1	2	3	4	5
6. My show jock encouraged me to do something I believed was morally wrong.	1	2	3	4	5

Section V

Please answer the following questions based on the livestock species you indicated in question # 9.

A **4-H Volunteer** is any adult helping youth with a project that has a role within the 4-H Organization.

If you **did not** work with a 4-H Volunteer, please skip this section and **continue to Section VI**.

Instructions: Please **CIRCLE** the most appropriate answer to each statement. **Please be honest.**

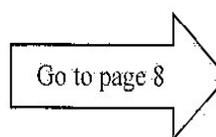
To what extent does your 4-H Volunteer exhibit the following behaviors?	Not At All	A Little	Sometimes	Quite A Bit	Yes, Definitely
1. My 4-H Volunteer gets upset with me when I don't perform well with my livestock.	1	2	3	4	5
2. My 4-H Volunteer is proud of me when I don't do well with my livestock species in the show ring.	1	2	3	4	5
3. Showing livestock improved my relationship with my 4-H Volunteer.	1	2	3	4	5
4. I had good conversations with my 4-H Volunteer because of showing livestock.	1	2	3	4	5
5. My 4-H Volunteer is controlling and manipulative when it comes to showing livestock.	1	2	3	4	5
6. My 4-H Volunteer encouraged me to do something I believed was morally wrong.	1	2	3	4	5

Section VI

Please answer the following questions based on the livestock species you indicated in question # 9.

Instructions: Please CIRCLE the most appropriate answer to each statement regarding your livestock project.

Based on your involvement, please rate whether you have had the following experiences in livestock exhibition.	Not At All	A Little	Sometimes	Quite A Bit	Yes, Definitely
1. I set goals for myself.	1	2	3	4	5
2. Learned to find new ways to achieve my goals.	1	2	3	4	5
3. I put all my energy into this activity.	1	2	3	4	5
4. Learned to push myself.	1	2	3	4	5
5. Learned to focus my attention.	1	2	3	4	5
6. Learned about organizing time and not procrastinating (not putting things off).	1	2	3	4	5
7. Learned about setting priorities.	1	2	3	4	5
8. Practiced self-discipline.	1	2	3	4	5
9. Learned about controlling my temper.	1	2	3	4	5
10. Became better at handling stress.	1	2	3	4	5
11. Learned that my emotions affect how I perform.	1	2	3	4	5
12. Made friends with someone of the opposite gender.	1	2	3	4	5
13. Learned I had a lot in common with people from different backgrounds.	1	2	3	4	5
14. Others counted on me.	1	2	3	4	5
15. Had an opportunity to be in charge of another group of peers.	1	2	3	4	5
16. Livestock exhibition opened up job or career opportunities for me.	1	2	3	4	5
17. Livestock exhibition helped me prepare for college.	1	2	3	4	5
18. Learned about developing plans for solving a problem.	1	2	3	4	5



Section VII

1. Please **rank** (e.g., first, second, third, fourth) the reasons why you show livestock. Using the list to the right, what is **your** order of importance with “**1**” being the most important to “**4**” being the least important.
- _____ Developing Life Skills
 _____ Making Money
 _____ Learning Livestock Skills
 _____ Winning Shows
2. Please **rank** (e.g., first, second, third, fourth) the reasons why **your parent/guardian** wants you to show livestock. Using the list to the right, how do you believe your **parent/guardian** would order the reasons of importance with “**1**” being the most important to “**4**” being the least important.
- _____ Developing Life Skills
 _____ Making Money
 _____ Learning Livestock Skills
 _____ Winning Shows
3. Did your parent/guardian show livestock when s/he was a youth?
- Yes
 No
 I Don't Know

Thank you for completing this survey!



APPENDIX C EMAIL TO TEACHERS

Title

Principal Investigator: Levon Esters, Ph.D., Associate Professor

Co-Principal Investigator: Abby Johnson, Master's Student

Youth Development and Agricultural Education

Purdue University

Dear Teacher,

My name is Abby Johnson and I am currently a master's student in the Youth Development & Agricultural Education Department at Purdue University. I am working on my research thesis at this time and I am about to begin the process of collecting my data. My thesis is entitled: "An Exploratory Study of Youth Exhibition Experiences in Livestock Projects."

I am emailing you because your agriculture program has been selected as a potential participant in this study in which I would like to disseminate a questionnaire to your current agriculture students and livestock project exhibitors. This questionnaire is designed to help myself understand the youth-adult interaction between the livestock exhibitor and how that interaction shapes the youth's view on competition and their learning experiences.

Dr. Esters is the chair of my thesis committee and will help guide this research. We are currently in the midst of IRB approval to conduct this study.

Should you decide to allow your agriculture program to participate in this study, your role will be very simple. I ask that you send parental consent forms and letters home with your students for their parents to read, sign and return back to you. I will then visit your agriculture program and classes for one full school day and distribute questionnaires at the beginning or end of each of your class periods. At this time I will also collect all parental consent forms and distribute assent forms to the students before they begin the questionnaire. The questionnaire will take approximately 15-20 minutes to complete.

I ask that you please notify me of your willingness to participate in this study and if you have any questions or concerns. I will then contact you to set up the best possible date to visit your classroom and to direct the parental consent forms and letter to you to distribute to your students.

Thank you for your consideration and I look forward to hearing back from you!

Best,

Abby Johnson

Abby Johnson

APPENDIX D PRINCIPAL PERMISSION LETTER

October 17, 2016

Principal
123 East Main Street
Anywhere, USA 12345

Dear Principal:

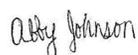
My name is Abby Johnson and I am currently a Master's student at Purdue University in the Department of Youth Development & Agricultural Education studying 4-H Extension and Youth Development.

I am writing to request permission to collect data for my research study in your school's agriculture program. My thesis is entitled "An Exploratory Study of Youth Exhibition Experiences in Livestock Projects." More specifically, I will be studying the role of the adult mentor and their influence on the learning experiences and views of competition on the youth livestock exhibitor.

If approval is granted, I will be spending one full school day in the agriculture program at the school's convenience. The data and results of this study will remain absolutely confidential and be used for educational purposes only.

Your approval to conduct this research study would be greatly appreciated.

Sincerely,



Abby Johnson

APPROVED:

Principal Signature

Date

Teacher Signature

Date

APPENDIX E LETTER TO PARENTS

October 3, 2016

Dear Agriculture Student Parent,

My name is Abby Johnson and I am currently a Master's Student in the Youth Development & Agricultural Education Department at Purdue University studying 4-H Extension. I am currently researching and writing my graduate thesis entitled: "An Exploratory Study of Youth Exhibition Experiences in Livestock Projects."

Your child is invited to be in a research study about their exhibition experiences gained from participation in livestock exhibition shows. Your child was selected as a possible participant because he/she is enrolled in an agricultural program class at Frontier, Clinton Central, Eastern Hancock, Hamilton Southeastern or Brownstown Central High Schools. The purpose of this study is to describe and explain factors that predict youth livestock exhibitors' perceptions of life skill development informed by their livestock exhibition experiences, youth-adult interactions regarding livestock knowledge, views of competition, and livestock exhibition motives. **Please note that even though your child may not exhibit livestock they are still invited to participate in this survey as there will be a specific stopping point for them in the survey.**

Attached with this letter you will find a Parental Consent Form that explains the research study in more detail. Please read and sign the Parental Consent Form and have your child return the form to school to their agriculture teacher. The teacher will then hold the form for pick up by the researcher. When I visit the school to collect the data, I will receive the signed Parental Consent Forms and your child will then be asked to sign an assent form for their participation in the study before they complete the survey. I will be conducting the assent process with the student prior to the research activity. The survey will take approximately 20 minutes to complete and your child will complete the survey first thing in their agriculture class at a later date. The teacher will notify your child of the day I will be visiting the class to distribute the surveys.

Thank you for your time and cooperation with this research study. Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Abby Johnson". The signature is written in a cursive, flowing style.

Abby Johnson
Youth Development & Agricultural Education
Purdue University
Master's Student
coya@purdue.edu

APPENDIX F PARENTAL CONSENT

RESEARCH PARTICIPANT PARENTAL CONSENT FORM
An Exploratory Study of Youth Exhibition Experiences in Livestock Projects

Abby Johnson
Youth Development & Agricultural Education
Purdue University

What is the purpose of this study?

The purpose of this study is to describe and explain factors that predict youth livestock exhibitors' perceptions of life skill development informed by their livestock exhibition experiences, youth-adult interactions regarding livestock knowledge, views of competition, and livestock exhibition motives. Your child is being asked to participate in this study because he/she is enrolled in an agricultural program class at their school. There will be approximately 250 people enrolled in this study.

What will I do if I choose to be in this study?

If you agree to your child participating in this study, your child will be asked to complete an 80-item questionnaire in their agriculture class at school. If your child is in more than one agriculture class they will only participate in the survey in one of those classes. Your child will be asked to indicate which adults served as sources of livestock knowledge and modeled positive behaviors regarding livestock exhibition, their views of competition, their perception of life skill development and their perception of livestock exhibition motives. The survey will take approximately **20** minutes to complete.

How long will I be in the study?

Your child will be in this study for one class period of their school day. The survey will take approximately 20 minutes to complete and the researcher will only visit the class for one school day.

What are the possible risks or discomforts?

Risks are minimal no greater than everyday life. The breach of confidentiality is a risk related to the research, however. Although this risk is a possibility, safeguards are in place as listed in the confidentiality section.

Are there any potential benefits?

If your child decides to participate in this study, there will be no direct benefit to your child. However, it is hoped that the information gained in this study will benefit youth livestock exhibitors and adult mentors by providing valuable information about competitive activities in relation to positive outcomes for youth involved in livestock exhibition.

Will I receive payment or other incentive?

There are no payments or incentives included in this research study.

What happens if I become injured or ill because I took part in this study?

This study is not greater than minimal risk.

Conflict of Interest Disclosure

The researchers do not have a conflict of interest, either financial or personal.

Will information about me and my participation be kept confidential?

The records of this study will be kept private. No names, social security numbers, or other identifiers will be used. Only the primary investigator and co-principal investigator will have access to data obtained for the study. Consent forms and completed surveys will be kept securely along with results for seven years after completion of this study.

What are my rights if I take part in this study?

Participation in this study is voluntary; however, a copy of the consent document will be given to the person signing the form. Your decision whether or not to allow your child to participate will not affect your current or future association with your child's grades or exhibition experiences. If you decide to allow your child to participate, you are free to withdraw your child at any time without affecting your child's participation in the livestock project. Furthermore, your child may also discontinue participation at any time.

Who can I contact if I have questions about the study?

The researcher conducting this study is Abby N. Johnson. If you have any questions regarding this study, you may contact the researcher at 812-593-8259 or coya@purdue.edu.

If you have questions about your rights while taking part in the study or have concerns about the treatment of research participants, please call the Human Research Protection Program at (765) 494-5942, email (irb@purdue.edu) or write to:

Human Research Protection Program - Purdue University
Ernest C. Young Hall, Room 1032
155 S. Grant St.,
West Lafayette, IN 47907-2114

Documentation of Informed Consent

I have had the opportunity to read this parental consent form and have the research study explained. I have had the opportunity to read about the research study, and my questions have been answered. My child is prepared to participate in the research study described above. I will be offered a copy of this consent form after I sign it.

Parent's Signature

Date

Participant's Name

Date

Researcher's Signature

Date

APPENDIX G ASSENT FORM

An Exploratory Study of Youth Exhibition Experiences in Livestock Projects

Principal Investigator: Levon Esters, Ph.D., Associate Professor

Co-Principal Investigator: Abby N. Johnson, Master's Student

Youth Development and Agricultural Education

Purdue University

ASSENT FORM

We are doing a research study. A research study is a special way to find out about something. In this study, we want to find out about youth exhibition experiences with livestock projects.

If you agree to be in this research study, we will ask questions about various sources of livestock knowledge, your views of competition, your motives for participating in livestock exhibition, adult behaviors and your perceptions of life skills. The questionnaire will take about **20** minutes to complete.

Being in this study is voluntary, meaning that you do not have to answer any questions. No one will be mad at you and your grade will not drop if you do not participate in this study. You can ask questions that you may have about this study at any time. If you do not want to be in this study or at any point you decide not to continue after you have started, just let me know. This study is confidential, meaning that no one will use your name with this study or see your answers.

Signing this paper means that you have read this or had it read to you and that you agree to be in this study. If you do not want to be in this study, do not sign. Remember, being in this study is up to you, and no one will be mad at you if you don't sign this or even if you change your mind later.

If you have any questions regarding this study, you may contact the researcher at coya@purdue.edu. If you have questions about your rights while taking part in the study or have concerns about the treatment of research participants, please call the Human Research Protection Program at (765) 494-5942, email (irb@purdue.edu) or write to: Human Research Protection Program - Purdue University, Ernest C. Young Hall, Room 1032 - 155 S. Grant St., West Lafayette, IN 47907-2114

I, _____, want to be in this research study.
(write your name here)

Signature of Participant

Date

Researcher's Signature

Date