

OKLAHOMA NON-COLLEGIATE LIVESTOCK
JUDGING COACHES' PERCEIVED
CONFIDENCE AND TRAINING
NEEDS

By

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Title of Study: OKLAHOMA NON-COLLEGIATE LIVESTOCK JUDGING COACHES' PERCEIVED CONFIDENCE AND TRAINING NEEDS

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This study's purpose was to identify Oklahoma non-collegiate livestock judging coaches' self-perceived confidence levels in evaluating livestock (cattle, goats, sheep and swine) and determine their interest in participating in coaching events and seminars. The population and scope included all Oklahoma non-collegiate coaches fielding a team at the State Qualifying Interscholastic livestock-judging contest Saturday, April 29, 2017 ($N = 84$). Of the 84 eligible participants, 46 completed the questionnaire. Descriptive statistics were used to analyze self-efficacy and desire to attend a clinic, while a chi-square test and correlation coefficients were used to determine relationships between respondents and their responses.

The typical Oklahoma livestock judging coach is a 40-year-old male teaching in rural Oklahoma with roughly 13 years of coaching experience. He also participated in livestock judging through FFA and raises either cattle and/or swine. Coaches were typically slightly to moderately confident in goats; moderately confident in sheep; and moderately to extremely confident in cattle and swine. Respondents were the least confident in evaluating goats overall. Estimating fat thickness in market animals was respondents' least confident specie-specific area and assessing volume in breeding animals was respondents' most confident. Female coaches are more likely to possess confidence in evaluating four criteria in goats and volume in breeding sheep. Older coaches are more likely to have confidence in evaluating growth in cattle. More coaching experience is likely to lead to greater overall species confidence in cattle, goats, sheep and swine.

Coaches' most typical methods of instruction include personal knowledge, visual live animal evaluation, and online videos. Participants are between very and extremely interested in all provided methods of instruction with online videos, a collegiate judging manual and attending a reasons-specific coaches' clinic/seminar showing the greatest interest. Participants want a seminar held in the summer for two days and are willing to travel up to 200 miles to attend. As age increased so did interest in DVDs. Coaches with more years of experience are more interested in sending students to livestock evaluation camps. Those who had judging experience in college also desired more DVD tools, online videos and a specie specific seminar/clinic.

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CHAPTER I

INTRODUCTION

“The livestock judging program at OSU has a rich tradition of not only winning judging competitions but also more importantly, in preparing students for future success and creating career opportunities” (Bloomberg & Johnson, 2014, p. 4). Since fielding its first team to compete at the national intercollegiate contest in 1913, the livestock-judging program at Oklahoma State University has been an integral part of the animal science department (Green, 1990). Winning its first national championship in 1925, OSU has taken home 17 national titles, more than any other collegiate program in the country (Bloomberg & Johnson, 2014). Along with national championships, more than 800 students have participated on the OSU livestock judging team, improving critical-thinking abilities, leadership skills, and communications abilities that put them ahead for job placement and potential career benefits (Medford, 2013). Nearly 85 percent of OSU judging alumni consider their time on the livestock judging team as “highly influential on their ultimate development,” with 66 percent claiming livestock judging was the most beneficial college experience they had (Bloomberg & Johnson, 2014, p. 3).

Considering the impact livestock judging may have on an individual’s career opportunities and skill sets, cultivating a successful and informational judging program benefits any animal science department at a four-year institution (C. Rusk, personal communication, April 13, 2017). Beyond the career skills potentially gained, learning to

evaluate livestock better prepares the next generation to improve the livestock industry (Nash and Sant, 2005). As presented in the Oklahoma State University livestock judging manual, students acquire the knowledge and mental picture of the ideal animal, learning to compare animals among their contemporaries, while aiding in their decision making skills and gaining the ability to defend their choices through oral reasons (Bloomberg and Johnson, 2014). In addition, a judging team visits top producers in both the purebred and commercial areas, seeing some of the best livestock in the country and creating vital connections for postgraduate life (Bloomberg and Johnson, 2014).

Despite what some may see as obvious benefits to having a livestock-judging program, in recent years funding and support of these programs has become harder to gain (C. Rusk, personal communication, April 13, 2017). Academic funding given to judging teams has slowed and outside funding has become the norm for many successful judging programs in frequent decades (Culp et.al., 2016). With an increase in outsource funding from alumni and livestock producers comes pressure to recruit the best students and uphold the livestock judging heritage of winning at OSU (B. Bloomberg, personal communication, January 25, 2017).

Herren (1984) saw livestock judging as a pursuit worthwhile to students and theorized for students to see success they must first be a part of a successful program and have a successful coach, starting at the youth level. Confidence plays a key role in an individual's success at any task and to encourage confidence, people must feel they are being coached or taught by individuals with a high level of self-efficacy in their skills (Bandura, 1993). In Bandura's social cognitive theory, the confidence levels of those who instruct is shown to have a direct correlation to the confidence and success seen in their

students (Bandura, 1993). Additionally, research into needs assessments shows creating coaching programs derived from coaching needs not only creates more useful programs but increases self-efficacy of participants, as well (Fung, 2003).

When directly applied to competitive livestock judging, Voight et.al. (2013) found effective coaching required those learning to view competency, experience and knowledge in the instructor. For students to view these traits in a coach, the quality of the content being taught must be high, personal motivation needs to be seen, and the coach should have the ability to motivate and encourage team members (Becker & Wrisberg, 2008). To be able to cultivate these traits, coach training and greater resources need to be more readily available to many youth FFA Career Development Event (CDE) instructors (Voight et.al., 2013). Many young FFA instructors entering into their service as coaches not only feel inadequate in their abilities but also have little confidence in specific areas they must coach (Layfield & Dobbins, 2002). So, what is necessary for coaches to feel more confident and successful in their coaching abilities?

Agricultural educators, whether they are just entering into teaching or have been instructing for some time, have expressed a need for more educational programs for CDE events (Layfield & Dobbins, 2002). When coaches were observed before and after participation in an educational coaching program, instructors not only increased their skills, but also they had heightened self-efficacy in their own abilities following participation (Malete & Feltz, 2002). Another study found while many youth coaches may use a learn by doing attitude and interaction with fellow peers as a main source of knowledge, many of those same individuals would prefer more coaching education and potential mentorships from professionals (Erickson et.al., 2008). Even experienced,

expert coaches feel a need for training opportunities to be provided for all levels of coaches (Voight et.al., 2013).

Considering the value livestock judging provides to students, continued involvement beyond the youth level and into the collegiate ranks is encouraged (Bolton et.al., 2015). With research showing the value of self-efficacy in coaches and value of coaching education programs, OSU has the opportunity to better the next generation of livestock judges by aiding the youth coaches who instruct them.

Statement of the Problem

The Oklahoma State University Animal Science Department provides a variety of livestock judging learning tools to the youth in this state and across the country but does little to provide instructional tools to agricultural instructors and non-collegiate livestock judging coaches (C. Rusk, personal communication, April 14, 2017). With increased participation in livestock judging camps, the Big 3 Field Days and the state FFA contest, the consideration to add events and seminars for high school coaches and instructors is critical (R. Gosz, personal communication, June 13, 2016). However, an extensive review of literature revealed no previous research related to non-collegiate livestock coaches' confidence and training needs.

Purpose

The purpose of this study was to identify Oklahoma non-collegiate livestock judging coaches' self-perceived level of confidence in evaluating four species of livestock (cattle, goats, sheep and swine) and determine their interest in participating in coaching events and seminars.

Objectives

The objectives for this study were as follows:

1. Describe the selected demographics (age, sex, years of experience coaching, judging background, livestock species raised, and location of school) of Oklahoma non-collegiate livestock judging coaches attending the 2017 State Interscholastic Livestock Judging contest.
2. Identify coaches' confidence in their evaluation of breeding and market animals in four major species (cattle, goats, sheep, and swine).
3. Determine methods currently used to teach livestock judging at the non-collegiate level.
4. Identify teaching methods of interest to non-collegiate livestock judging instructors.
5. Describe the interest level of non-collegiate livestock judging instructors in attending coaches' seminars provided by Oklahoma State University.
6. Determine the relationship between demographics (age, sex, years of experience coaching, and livestock species raised) and confidence levels in four major species (cattle, goats, sheep, and swine).
7. Determine the relationship between demographics (age, sex, years of experience coaching, judging background, and livestock species raised) and methods of interest.

Scope

The scope of this study included Oklahoma agricultural teachers and extension agents fielding a 4-H or FFA team at the state-qualifying livestock judging contest on Saturday, April 29, 2017 ($N = 84$). Convenience sampling was used.

Significance

The significance of this study and its results are important in assessing not only the confidence levels and evaluation skills of non-collegiate livestock judging coaches but also will help Oklahoma State University staff better understand the tools they can provide to enhance the skill set of these coaches (C. Rusk, personal communication, April 14, 2017). For the basic building blocks of livestock evaluation to be put in place, students must have proper instruction from coaches and educators, leading to a need for collegiate judging programs to provide more tools, instructional material or even judging seminars to ensure effective coaching (R. Gosz, personal communication, June 13, 2017).

Conceptual Framework

Successful livestock coaching on the non-collegiate level requires an effective coaching style and students seeing the coach as competent, knowledgeable and having extensive experience (Voight et.al., 2013). Bandura's Theory of Self-efficacy, specifically focused on teachers' self-efficacy and adapted from the social cognitive theory, is effective in illustrating how the confidence levels of a teacher or coach can lead to increased success and confidence in students (Bandura, 1993). Defined, self-efficacy "refers to the beliefs in one's capabilities to organize and execute the courses of action required to produce given attainment" (Bandura, 1977, p. 3).

The effects of self-efficacy impact a variety of cognitive processes for teachers and students, including goal setting, appraisal of one's abilities, and commitment to an effort (Bandura & Jourden, 1991). "The task of creating environments conducive to learning rests heavily on the talents and self-efficacy of teachers" (Bandura, 1993, p. 140). Those who are involved in instructing youth and possess stronger instructional self-efficacy create stronger experiences for students while simultaneously improving their personal self-efficacy, increasing their cognitive development (Bandura, 1993). Bandura (1993) also stated teachers' personal efficacy in the areas of motivation and promotion of learning can affect the learning environment they create greatly as well as the amount of achievement their students reach. Specifically, teachers play a vital role in increasing self-efficacy, as Bandura (1993) explains this to be the major determining factor behind a students' success:

"The higher their perceived efficacy, the better they perfect their cognitive capabilities. Self-efficacy is influenced by acquisition of skills, but is not merely a reflection of them. Children with the same level of cognitive skill development differ in their intellectual performance depending on the strength of their perceived self-efficacy." (Bandura, 1993, p. 136)

Similarly, instructors who have self doubt in their ability as instructors are more likely to build a learning environment that destroys student self-efficacy, undermining their perceived abilities (Gibson and Dembo, 1984). Bandura (1993) also found teachers with a higher degree of personal efficacy had a more positive attitude toward the goal of educating and had a stronger belief in their instructional tools and practices. When it

comes to academics, perceived efficacy not only promoted this achievement but also raised personal goals of students (Bandura, 1993).

Self-efficacy plays a key component in coaching competence, leading to the success of a team and the motivation and success of the individuals (Becker & Wrisberg, 2008). Feltz et.al. (1999) defined this level of coaching efficacy as “the extent to which coaches believe they have the capacity to affect the learning and performance of their pupils” (p. 765). By understanding the importance of self-efficacy, and looking at previous research showing the importance of confidence and competency in coaches, faculty and staff at Oklahoma State University can develop a plan to promote this confidence in coaches of youth who may some day enter into collegiate livestock judging (C. Rusk, personal communication, April 14, 2017).

When specifically applied to coaching, Fung (2003) theorized by evaluating present coaching preparation and comparing that to current coaching efficacy of participants, those who create coaching programs may have a better reference in creating more useful programs in the future. Utilizing the Coaching Efficacy Scale and the four dimensions of coaching - motivating athletes, strategy use, coaching technique and character building skills, Fung determined:

This information could serve as a template to evaluate the present coach preparation program and as a reference for planning future programs. The rationale is that if the four dimensions are important for coaching, then deficit in any aspect would have debilitating effects on the quality of coaching and warrants serious attention from those who work in coach preparation and coach development programs (p. 13).

Coaching efficacy and the needs of coaches in a preparation program may be directly correlated (Fung, 2003). Understanding needs and utilizing a needs assessment is important in identifying specific problem areas, creating support, developing a strategy to evaluate success moving forward, and determining the costs and benefits of training (Brown, 2002). By utilizing training needs assessments, the skill and knowledge of individuals can be examined, leading to more detailed training and focusing on where the greatest need or knowledge gap exists (McClelland, 1992). In the area of agriculture, top decision makers not only possess communications skills and creativity but more importantly self-confidence (Shanteau, 1988). By enhancing training programs for future individuals, companies, and organizations, in turn, obtain maximum value from their training efforts and, simultaneously, their employees (McClelland, 1992).

A common structure for needs assessments is the Borich Needs Assessment Model. This needs assessment allows better training institutions to have the information necessary to improve upon training programs (Borich, 1980). As discussed by Borich, needs assessments address the discrepancies between what is and what should be, putting together a conceptualized idea of needs necessary to build a potential educational program or to measure the overall effectiveness of a program (Borich, 1980). While needs assessments effectiveness is entirely dependent on an individual's abilities to objectively evaluate their own competencies, this type of model, if conducted properly, can be used to bridge the gap between educational goals and actual trainee performance (Borich, 1980).

Institutions should provide faculty with the training programs that will not only build their skill set but also will allow them to advance themselves as teachers and

instructors (Rocca, 2010). While administrators may think certain areas need to be improved upon, this may not be representative of an entire staff or even of one teaching member; this is where needs assessments can be of value (Rocca, 2010). Needs assessments, such as the Borich model, have been found to be useful in determining the educational needs and development tools necessary to improve skills in many secondary agriculture teachers (Edwards & Briers, 1999). Specifically for agricultural educators, “identifiable areas of need may be used as decision rules for determining future resources allocation” (Edwards & Briers, 1999, p. 2).

While some areas of coaching may be strong, others that are lacking can have an overall effect on coaching ability and self-efficacy (Fung, 2003). By implementing a needs assessment to understand where coaches are deficient, researchers could better advise coach educators in mentorship programs and provide valuable information to trainee coaches, establishing a stronger in-service or continuing education program (Fung, 2003). Applying these basic principles and the importance of needs assessments could help those at Oklahoma State University better understand the needs of coaches on the youth level (R. Gosz, personal communication, June 13, 2016). By combining an evaluation of self-efficacy in Oklahoma non-collegiate livestock coaches, alongside a needs assessment, Oklahoma State University hopes to develop a useful coaching education program that can better bridge the gap of knowledge from the youth to the collegiate level.

CHAPTER II

METHODOLOGY

Introduction

This chapter consists of the methodology used to conduct this study, including the Institutional Review Board approval, population, instrumentation, reliability and validity, data collection, and data analysis.

Institutional Review Board

Federal regulations and Oklahoma State University policy require a research study involving human subjects must be reviewed before the research can be conducted. OSU IRB analyzed the application; corrections were made and approved June 20, 2016. Following initial IRB approval the research design and method of recruitment then was modified and re-approved April 6, 2017.

Population

The population of this study included Oklahoma agricultural teachers and extension agents fielding a 4-H or FFA team at the state qualifying livestock judging contest Saturday, April 29, 2017 ($N = 84$).

Instrumentation

In consultation with OSU faculty, a researcher-designed instrument was created and used. The questionnaire created sought to assess high school livestock judging

coaches' self-efficacy of livestock evaluation as well as their level of interest to participating in judging education programs.

A Likert-type scale was used to assess confidence in judging ability among four species: cattle, goats, sheep and swine. The areas of evaluation in which coaches were asked to evaluate their abilities included (a) identifying structural correctness, (b) visualizing proper balance, (c) evaluating appropriate muscle definition, (d) estimating appropriate fat thickness in market animals, (e) assessing volume in breeding animals, and (f) examining growth. Respondents were asked to rank their abilities using the following anchors: *Severely Lacking Confidence*, *Moderately Lacking Confidence*, *Slightly Lacking Confidence*, *Slightly Confident*, *Moderately Confident* or *Extremely Confident*.

To understand individual coaching styles, researchers asked coaches what tools they use to instruct students. Options included (a) personal knowledge, (b) high school judging manual, (c) collegiate judging manual, (d) visual live animal evaluation, (e) personally recorded videos, (f) DVD tools, (g) online videos, (h) sending students to evaluation camps or (i) other. Additionally, through another Likert-type scale, coaches were asked to identify their level of interest in using various coaching tools. These items included (a) collegiate judging manual, (b) DVD tools, (c) online videos, (d) sending students to evaluation camps, (e) comprehensive coaches' seminar/clinic, (f) specie-specific coaches' seminar/clinic, and (g) reasons-specific coaches' seminar/clinic. Anchors were *Not Interested at All*, *Slightly Interested*, *Moderately Interested*, *Very Interested*, *Extremely Interested*.

To supplement these questions, participants also were asked (1) how much time coaches are willing to spend at a seminar/clinic; (2) what time of year are coaches most willing to participate; and (3) how many miles coaches would be willing to travel to attend a seminar or clinic.

Demographic questions consisted of six items: age, sex, year(s) of experience coaching livestock judging, livestock judging background, species raised by the individual, and population of the town where the individual coaches/instructs.

Validity & Reliability

To ensure reliability of the questionnaire, a pilot test was administered to coaches attending the 2016 Oklahoma State University Livestock Judging camp with students. Face validity was ascertained through group discussion with participants in the pilot survey following participation. None of the participants expressed issues or changes to be made with the survey instrument. Once results were obtained from the pilot ($n = 19$), reliability was tested using Cronbach's alpha for the five main areas of the survey instrument: cattle (six items; $a = .98$), swine (six items; $a = .91$), sheep (six items; $a = .93$), goats (six items; $a = .95$) and tools (seven items; $a = .86$). According to psychometric theory, a Cronbach's alpha value of 0.70 or above is considered acceptable for any preliminary research, with a coefficient of 0.80 or better for basic research and 0.90 or above for applied research (Nunnally, 1978).

Data Collection

Following initial IRB approval, the research design and method of recruitment was then modified and re-approved April 6, 2017. The population of this study included Oklahoma agricultural teachers and extension agents fielding a 4-H or FFA team at the

state qualifying livestock judging contest Saturday, April 29, 2017 ($n = 84$). An email was sent to all potential participants on April 21, 2017, notifying all coaches of the study being conducted and inviting their participation; however, no link to the instrument was included at this time. Following their students entering the contest, coaches were asked to convene in a classroom, where they were then gathered and provided a visual link to access the instrument. All coaches completing the link on the day of the contest did so prior to the contest starting. The instrument was administered online via the Qualtrics system. The questionnaire could be completed using a computer, tablet or smart phone. The researchers administered the online questionnaire following Dillman's Tailored Design Method and the specifications indicated for web questionnaires and implementation (Dillman, Smyth, & Christian, 2014).

Following instrumentation during State Interscholastics, a follow-up email was sent to all participating coaches, utilizing clickable URL. Those who chose to participate in the survey through a link provided in the email after Monday, May 1, 2017, were considered as late respondents, while those who participated during the state contest were labeled as respondents, all before results were determined. To ensure no overlap occurred in responses between respondents and late respondents, participants gave their names and schools in a separate but linked instrument that simultaneously entered them in a free drawing for OSU items, such as OSU livestock judging apparel. The link remained open from May 1, 2017, through Wednesday, May 10, 2017. Lindner, Murphy and Briers (2001) recommend the comparison of early and late respondents as one of the protocols to use in addressing non-response error. "Only if no differences are found should results be generalized to target the population. On the other hand, if differences are found, those

differences should be described and limitations in generalizing should be noted” (Lindner, Murphy & Briers, 2001, p. 52). Of the 84 eligible participants, 46 completed the survey, resulting in a 55% response rate.

Data Analysis

Data were analyzed using SAS Statistics as well as SPSS for Macintosh 21. An independent samples t-test was run to compare early and late respondents to determine if the two groups could be combined. Slight differences were found in the independent samples t-test in only two categories. Therefore, data in these two areas may not be generalizable to the population: visualizing proper balance in swine and identifying structural correctness in goats.

It should be noted this study is limited to only non-collegiate coaches in Oklahoma. The descriptive statistics used to report the demographic information of the participants, self-reported confidence levels, and exploratory coaching tools included frequencies, percentages, mean, mode and standard deviation. Descriptive statistics can be used in identifying trends, illustrating various aspects of the instrument in detail, and representing a distribution of overall data collected (Creswell, 2012).

To determine if correlations existed among study variables, the researcher ran Chi square tests between categorical variables and calculated Pearson’s correlation coefficients, testing the linear relationships between continuous variables. As explained by Vogt (2005), a chi-squared test can be used when “a researcher wants to see if there are statistically significant differences” (p. 43) within a study.. Results were measured and those ranging within the 95 percent confidence level ($p < 0.05$) were considered significant.

CHAPTER III

OKLAHOMA NON-COLLEGIATE LIVESTOCK JUDGING COACHES' PERCEIVED CONFIDENCE IN EVALUATION SKILLS

Abstract

Livestock judging has a significant impact on individuals' career opportunities and skill sets; therefore, cultivating a successful and informational judging program benefits any animal science department at a four-year institution. Those in the animal science department at Oklahoma State University work to ensure students are coached and prepared properly at the non-collegiate level for their continued success in the future. The purpose of this study was to identify Oklahoma high school livestock judging coaches' self-perceived level of confidence in evaluating four species of livestock (cattle, goats, sheep and swine) to better understand their coaching needs. Data was collected at the 2017 State Interscholastics livestock judging competition with 46 4-H and FFA livestock judging coaches participating. The typical respondent was a 40-year-old, male, teaching in rural Oklahoma with roughly 13 years of livestock coaching experience. They also had predominantly participated in livestock judging themselves while in 4-H or FFA, while also raising cattle or hogs, as well. With respect to confidence in identifying structural correctness, visualizing proper balance, evaluating appropriate muscle definition, estimating appropriate fat thickness in market animals, assessing volume in breeding animals, and examining growth, participants indicated they were the least

confident in evaluating goats, moderately confident in evaluating sheep, and moderately to extremely confident in evaluating cattle and swine. Significant relationships exist between confidence in four species-specific traits in goats and the sex of the respondent; volume in breeding sheep and sex; identifying structural correctness in sheep and age; and examining growth in cattle and years of coaching. Additionally, the more years of coaching experience the greater the relationship to their overall species confidence is in cattle, goats, sheep and swine. Collegiate judging programs wishing to develop livestock judging curriculum and seminars for youth coaches should focus primarily on instructing evaluation of goats and sheep. Future research into self-efficacy of coaches on the non-collegiate level could be expanded to other regions or nationwide. Additionally, a potential comparison of team contest results with self-reported confidence levels among respective coaches could be conducted.

Introduction

While curriculum in the classroom has a role in the learning experience, students can benefit greatly from out-of-class experience, gaining critical thinking skills and acquiring relational skills that can attribute to long-term satisfaction and success past attending school (Kuh, 1995). Livestock judging plays a role in the out-of-class experience many students gain (Medford, 2013). As defined by Bloomberg and Johnson, livestock judging is “the study of an animal’s form and shape in relationship to its intended function” (2014, p. 6). Competitive livestock judging serves as an educational experience to enhance knowledge for youth participating through 4-H and FFA as well as through competition in a collegiate setting (B. Bloomberg, personal communication, January 25, 2017). The intended purpose of learning and evaluating livestock through competition is to prepare students to improve the livestock industry in the future (Nash &

Sant, 2005). Additionally, Nash and Sant (2005) theorized the evaluation activity allows youth participants to rank animals logically, based on factors most desirable to least desirable, allowing youth to build life skills for college or in a career.

Livestock judging as an activity forces students to use mental ability, livestock skills, and work ethic to reach a goal (Meyers et.al., 2015). Bolton et.al. (2015) found career skills and interpersonal skills are developed from participating in judging. Specifically, skills such as public speaking, hard work, dedication, and the ability to be self-confident were desired from a career standpoint, while verbal communication and being goal-oriented were seen as the interpersonal skills most quickly developed (Bolton et.al., 2015). Furthermore, a study at Texas A&M University found a positive correlation between those participating in livestock judging and career skills gained. Time management, self-assertiveness, ability to work with others, and being task-oriented were determined to be the predominately valuable skills gained (Cavinder et al., 2011). A study conducted by White et.al., (2012) also found students participating on a competitive judging team demonstrated numerically higher critical-thinking scores when compared to fellow students not participating in animal evaluation and when compared to a national average of students.

Understanding livestock judging plays an important role in shaping skills beneficial for interpersonal and career growth, youth who participate in this secondary school extracurricular activity should continue participation at the collegiate level (Bolton et.al., 2015). The transition from youth judging to participating at a higher level can be difficult for students who are not properly trained or coached (B. Bloomberg, personal communication, January 25, 2017). Confidence or self-efficacy in ability allows individuals to better visualize their success, leading to more positive thinking and

enhanced performance (Bandura, 1993). Considering confidence can lead to further success and visualization, for youth to feel confident in their decision-making and abilities, they need to be instructed, or coached, by an individual with a high level of personal and teaching self-efficacy (Bandura, 1993).

According to Becker and Wrisberg (2008), coaching consists of helping the individual and doing things to benefit the team as a whole. In a study of Tennessee women's basketball coach Pat Summit's coaching style, the most important aspect to coaching is positive instruction (Becker & Wrisberg, 2008). Along with instruction, practices are intense and replicate game-like situations, with each team member receiving equal feedback despite skill level (Becker & Wrisberg, 2008). Additionally, Summit's coaching style enforced pre-instruction be done to the team as a whole and post-instruction be administered to members of the team on an individual basis (Becker & Wrisberg, 2008). Utilizing these ideas could be effective in better understanding what makes a good coach for any competitive team.

When specifically applied to competitive livestock judging, several coaching traits have been identified. Successful coaches at the youth level listed their undergraduate courses and participation on a collegiate livestock judging team as important sources of their knowledge and confidence (Herren, 1984). Later, Becker and Wrisberg (2008) determined coaching competence, the quality of the content being taught, personal motivation, and the ability to motivate members of the team led to the greatest coaching success. Voight et.al. (2013) built on these areas by defining seven categories of focus successful FFA Career Development Event coaches employed with their judging teams. These categories included (1) expectations both from the coach and students (2) the students seeing the coach as being effective (3) coach experience (4)

team goals being set (5) support from the coach (6) a foundational knowledge of material, and (6) a positive learning environment being cultivated (Voight et.al., 2013). A combination of the first seven traits in a coach led to an ultimate goal of youth development in team members and eventually a high success rate of the team (Voight et.al., 2013).

Livestock judging seems to be a worthwhile venture and to promote success, a successful coach and program is necessary (Herren, 1984). Unfortunately, new instructors starting out as coaches not only feel inexperienced and knowledge but this is directly correlated to their lack of confidence in the areas they must coach (Layfield & Dobbins, 2002). Understanding where coaches feel confident in their abilities is a key to better understanding what collegiate judging programs, such as Oklahoma State University, can provide to enhance the learning experience of youth and the coaching ability of those individuals instructing them. With this in mind, the objectives of this study were

1. Describe the selected demographics (age, sex, years of experience coaching, judging background, livestock species raised, and location of school) of Oklahoma high school livestock judging coaches attending the 2017 State Interscholastic Livestock Judging contest.
2. Identify coaches' confidence in their evaluation of breeding and market animals in four major species (cattle, goats, sheep, and swine).
3. Determine the relationship between demographics (age, sex, years of experience coaching, and livestock species raised) and confidence levels in four major species (cattle, goats, sheep, and swine).

Conceptual Framework: Social Cognitive Theory – Teachers’ Self-efficacy

Coaching on the non-collegiate level requires competency, knowledge and years of experience, all of which aid in an effective coaching style and students observing their coach as confident (Voight et.al., 2013). When specifically applied to the self-efficacy of teachers, Bandura’s Theory of Self-efficacy, is a strong theory in explaining how increased success in students can be directly linked to the confidence level of the teacher or coach (Bandura, 1993). Bandura defines self-efficacy as “the beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainment” (Bandura, 1977, p. 3).

Cognitive functions such as goal setting, commitment and assessment of abilities can be highly affected by levels of self-efficacy for both students and teachers (Bandura & Jourden, 1991). As Bandura points out, many times talent and self-efficacy of instructors creates an effective learning environment for students beyond other traits (Bandura, 1993). Cognitive development and improvement of self-efficacy tends to happen for teachers while they simultaneously develop strong experiences for their students, instructing and building on their students’ self-efficacy, as well (Bandura, 1993). Teachers’ personal efficacy with respect to motivation and promotion of learning not only cultivates an environment for useful instruction, but also it increases the amount of accomplishment students reach (Bandura, 1993).

Similarly, self-doubt in ability among teachers constructs a learning atmosphere weakening capabilities in students and hurting student self-efficacy (Gibson & Dembo, 1984). “Students who end up being taught by teachers with a low sense of self-efficacy suffer losses in perceived self-efficacy and performance expectations” (Bandura, 1993, p. 142). In addition to lack of confidence negatively affecting students, it was also found

teachers with high personal efficacy were more positive and goal-oriented in educating and had more trust in their personal instructional tools and practices (Bandura, 1993). Perceived self-efficacy in academics by an instructor increased achievement and enhanced the goal setting of students within the classroom (Bandura, 1993).

The most important skill when assessing top decision makers in the agricultural industry was self-confidence, even more so than communication and creativity (Shanteau, 1988). When it comes to coaching competence in livestock judging, increased self-efficacy leads to greater accomplishment of a team and increased motivation and success among the team members (Becker & Wrisberg, 2008).

Methodology

In consultation with OSU faculty, a researcher-designed instrument was created and used in this research study, which sought to assess high school livestock judging coaches' self-efficacy of evaluation. A Likert-type scale was used to ask six evaluation questions for each of the four livestock species evaluated in a livestock-judging contest: cattle, hogs, sheep, and goats. Priority traits were determined using the Oklahoma State University livestock-judging manual (Bloomberg & Johnson, 2014). These priority traits include structural correctness, proper balance, muscle shape, appropriate fat thickness in market animals, volume in breeding animals, and ability to determine growth and performance. These questions were part of a larger survey instrument.

Federal regulations and Oklahoma State University policy require a research study involving human subjects to be reviewed before research is conducted. OSU IRB assessed the application; a researcher made corrections and the study was approved June 20, 2016. To ensure reliability of the questionnaire used in this instrument, a pilot test was administered to coaches attending the 2016 Oklahoma State University Livestock

Judging camp as chaperones. Face validity was achieved through group discussion with pilot survey respondents following participation. No participants expressed changes to be made with the instrument. Once results were obtained from the pilot ($n = 19$), reliability was tested using Cronbach's alpha for the four main areas of the survey instrument: cattle (six items; $\alpha = .98$), swine (six items; $\alpha = .91$), sheep (six items; $\alpha = .93$), and goats (six items; $\alpha = .95$). According to psychometric theory, a Cronbach's alpha value of 0.70 or above is considered acceptable for any preliminary research (Nunnally, 1978).

Following initial IRB approval, the study was administered and researchers determined these original results were not sufficient. The research design and method of recruitment was then modified and re-approved April 6, 2017. The population of this study included Oklahoma agricultural teachers and extension agents fielding a 4-H or FFA team at the state qualifying livestock judging contest Saturday, April 29, 2017 ($N = 84$). An email was sent to all potential participants on April 21, 2017, notifying all coaches of the study being conducted and inviting their participation as a initial method of recruitment; however, no link to the instrument was included at this time. Following students entering the contest the morning of April 29, coaches were asked to convene in a classroom at the Totusek Arena, where they were gathered and provided a visual link to access the instrument. All coaches completing the questionnaire on the day of the contest did so prior to the contest starting. The instrument was administered online via the Qualtrics system. The questionnaire could be completed using a computer, tablet or smart phone. The researchers administered the online questionnaire following Dillman's Tailored Design Method, specifically following the guidelines indicated for web questionnaires and implementation (Dillman, Smyth, & Christian, 2014).

Following instrumentation during State Interscholastics, a follow-up email was sent to all coaches, utilizing clickable URL. Those who chose to participate in the survey through this link provided after Monday, May 1, 2017, were considered as late respondents, while those who participated during the state contest were labeled as early respondents, all before results were determined. To ensure no overlap occurred in responses between early and late respondents, participants gave their names and schools in a separate but linked instrument. This link also entered them in a free drawing for OSU items, such as OSU livestock judging apparel. This link remained open from May 1, 2017, through Wednesday, May 10, 2017. Lindner, Murphy and Briers (2001) stipulate the comparison of early and late respondents as one of the acceptable protocols to use in combating non-response error. “Only if no differences are found should results be generalized to target the population. On the other hand, if differences are found, those differences should be described and limitations in generalizing should be noted” (Lindner, Murphy & Briers, 2001, p. 52). Forty-six of the 84 eligible participants completed the survey, resulting in a 55% response rate.

Data was analyzed using SAS Statistics and SPSS for Macintosh 21. To compare early and late respondents an independent samples t-test was run, allowing researchers to gain generalizability to the population. Differences were found in the independent samples t-test in two categories. Data in these areas may not be generalizable: visualizing proper balance in swine and identifying structural correctness in goats. The descriptive statistics used to report demographics and self-reported confidence levels included frequencies, percentages, mean, mode and standard deviation.

To determine if correlations existed among study variables, the researcher ran Chi square tests between qualitative variables and calculated Pearson’s correlation

coefficients between quantitative variables. Results were measured and those ranging within the 95 percent confidence level ($p < 0.05$) were considered significant.

Results and Discussion

Demographics

Respondents ranged in age from 22 to 62 with the typical non-collegiate judging coach being 40 years old ($SD = 11.52$). Most coaches were male ($f = 35, 76.09\%$) with only 11 respondents being female (23.91%). Years of coaching experience ranged from one to 42, with mean years of experience of 12.64 ($SD = 11.41$). Judging background for coaches included 4-H ($f = 17, 36.96\%$) or FFA ($f = 32, 69.57\%$), with some experience judging at a two-year college ($f = 21, 45.65\%$) or four-year college ($f = 12, 26.09\%$). Some coaches had no previous judging experience ($f = 3, 6.52\%$). Forty-one respondents indicated they personally raised one or more of four species of livestock. Of those, 32 (69.57%) raised cattle, 7 (15.22%) raised goats, 4 (8.70%) raised sheep, and 22 (47.83%) raised swine, with two respondents (4.35%) indicating they raised horses and/or rabbits. The typical respondent coached in a rural area ($f = 37, 80.43\%$), with seven respondents indicating instructing in a city area (15.22%) and only one respondent in an urban area (2.17%).

Confidence in Evaluating Cattle

With respect to evaluating cattle, respondents indicated their confidence levels were primarily extremely confident ($f = 22, 47.83\%$) in identifying structural correctness; extremely confident ($f = 28, 62.22\%$) in visualizing proper balance; extremely confident ($f = 23, 51.11\%$) in evaluating appropriate muscle definition; moderately confident ($f = 23, 50.0\%$) in estimating appropriate fat thickness in market animals; extremely confident

($f = 24$, 53.33%) in assessing volume in breeding animals; and moderately confident ($f = 18$, 40.00%) in examining growth (see Table 1).

Confidence in Evaluating Goats

With respect to evaluating goats, respondents indicated their confidence levels in evaluation to be moderately confident ($f = 17$, 36.96%) in identifying structural correctness; moderately confident ($f = 20$, 43.48%) in visualizing proper balance; moderately confident ($f = 16$, 34.78%) in evaluating appropriate muscle definition; slightly confident ($f = 21$, 45.65%) in estimating appropriate fat thickness in market animals; moderately confident ($f = 17$, 36.96%) in assessing volume in breeding animals; and moderately confident ($f = 17$, 36.96%) in examining growth (see Table 2).

Table 1

Confidence in Cattle

	<i>n</i>	Severely lacking confidence		Moderately lacking confidence		Slightly lacking confidence		Slightly confident		Moderately confident		Extremely confident	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Identifying structural correctness	46	1	2.17	1	2.17	1	2.17	4	8.7	17	36.96	22	47.83
Visualizing proper balance	45	0	-	2	4.44	0	-	3	6.67	12	26.67	28	62.22
Evaluating appropriate muscle definition	45	0	-	1	2.22	2	4.44	4	8.89	15	33.33	23	51.11
Estimating appropriate fat thickness in market cattle	46	0	-	4	8.7	4	8.7	6	13.04	23	50.0	9	19.57
Assessing volume in breeding cattle	45	0	-	2	4.44	0	-	1	2.22	18	40.00	24	53.33
Examining growth	45	1	2.22	1	2.22	2	4.44	7	15.56	18	40.00	16	35.56

Note: Modal responses have been highlighted.

Table 2

Confidence in Goats

	<i>n</i>	Severely lacking confidence		Moderately lacking confidence		Slightly lacking confidence		Slightly confident		Moderately confident		Extremely confident	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Identifying structural correctness	46	2	4.35	3	6.52	2	4.35	15	32.61	17	36.96	7	15.22
Visualizing proper balance	46	2	4.35	4	8.7	3	6.52	9	19.57	20	43.48	8	17.39
Evaluating appropriate muscle definition	46	3	6.52	1	2.17	6	13.04	10	21.74	16	34.78	10	21.74
Estimating appropriate fat thickness in market goats	46	2	4.35	5	10.87	6	13.04	21	45.65	8	17.39	4	8.7
Assessing volume in breeding goats	46	1	2.17	4	8.7	3	6.52	10	21.74	17	36.96	11	23.91
Examining growth	46	1	2.17	5	10.87	5	10.87	9	19.57	17	36.96	9	19.57

Note: Modal responses have been highlighted.

Confidence in Evaluating Sheep

With respect to evaluating sheep, respondents indicated their confidence levels were primarily moderately confident ($f = 22, 47.83\%$) in identifying structural correctness; moderately confident ($f = 19, 41.30\%$) in visualizing proper balance; moderately confident ($f = 16, 35.56\%$) in evaluating appropriate muscle definition; moderately confident ($f = 15, 32.61\%$) in estimating appropriate fat thickness in market animals; moderately confident ($f = 16, 34.78\%$) in assessing volume in breeding animals; and moderately confident ($f = 15, 33.33\%$) in examining growth (see Table 3).

Confidence in Evaluating Swine

With respect to evaluating swine, respondents indicated their confidence levels were primarily extremely confident ($f = 20, 43.48\%$) in identifying structural correctness; extremely confident ($f = 19, 41.30\%$) in visualizing proper balance; extremely confident ($f = 25, 54.35\%$) in evaluating appropriate muscle definition; moderately confident ($f = 19, 41.30\%$) in estimating appropriate fat thickness in market animals; moderately confident ($f = 22, 48.89\%$) in assessing volume in breeding animals; and moderately confident ($f = 18, 40.00\%$) in examining growth (see Table 4).

Table 3

Confidence in Sheep

	<i>n</i>	Severely lacking confidence		Moderately lacking confidence		Slightly lacking confidence		Slightly confident		Moderately confident		Extremely confident	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Identifying structural correctness	46	1	2.17	2	4.35	2	4.35	11	23.91	22	47.83	8	17.39
Visualizing proper balance	46	1	2.17	2	4.35	1	2.17	12	26.09	19	41.3	11	23.91
Evaluating appropriate muscle definition	45	1	2.22	2	4.44	4	8.89	8	17.78	16	35.56	14	31.11
Estimating appropriate fat thickness in market lambs	46	2	4.35	3	6.52	5	10.87	14	30.43	15	32.61	7	15.22
Assessing volume in breeding sheep	46	1	2.17	2	4.35	3	6.52	9	19.57	16	34.78	15	32.61
Examining growth	45	2	4.44	2	4.44	2	4.44	12	26.67	15	33.33	12	26.67

Note: Modal responses have been highlighted.

Table 4

Confidence in Swine

<i>n</i>	Severely lacking confidence		Moderately lacking confidence		Slightly lacking confidence		Slightly confident		Moderately confident		Extremely confident		
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Identifying structural correctness	46	2.17	1	2.17	3	6.52	8	17.39	13	28.26	20	43.48	
Visualizing proper balance	46	0	2	4.35	0	-	7	15.22	18	39.13	19	41.3	
Evaluating appropriate muscle definition	46	0	2	4.35	0	-	6	13.04	13	28.26	25	54.35	
Estimating appropriate fat thickness in market swine	46	0	1	2.17	4	8.7	6	13.04	19	41.3	16	34.78	
Assessing volume in breeding swine	45	0	1	2.22	3	6.67	5	11.11	14	31.11	22	48.89	
Examining growth	45	1	2.22	1	2.22	0	-	10	22.22	18	40.00	15	33.33

Note: Modal responses have been highlighted.

Correlations between Demographics and Confidence

Chi Square tests were run to determine if a relationship existed between respondents' confidence in judging each specie and their age, their sex, their judging background or the species they raised. The tests included comparisons of overall confidence in a species as well as specific characteristics among cattle, goats, sheep, and swine.

No significant relationships were found between judging background and confidence levels or between species raised and confidence levels. A significant relationship ($p < 0.05$) exists for four species-specific traits in goats and the sex of the respondent (see Table 5).

Table 5.

Significant Correlations Between Species-specific Traits and Sex, Age and Years of Coaching

Variable	Sex ^a	Age	Years of Coaching
Identifying structural correctness in goats	.0248*	-	-
Visualizing proper balance in goats	.0350*	-	-
Assessing volume in breeding goats	.0149*	-	-
Examining growth in goats	.0183*	-	-
Assessing volume in breeding sheep	.0293*	-	-
Identifying structural correctness in sheep	-	.0278*	-
Examining growth in cattle	-	-	.0433*

Note: * $p < 0.05$. ^aSex: 1 = male; 2 = female.

Additionally, years of coaching and examining growth in cattle ($p < 0.0443$), age and identifying structural correctness in sheep ($p < 0.0278$), and sex and assessing

volume in breeding sheep ($p < 0.0293$) had significant relationships. No significant relationships were found for any other demographic variable and species-specific confidence levels.

When assessing overall confidence levels, a strong correlation exists between years of coaching and overall confidence levels in all four species (see Table 6).

Table 6.

Correlations Between Years of Coaching and Overall Species Confidence

	Cattle	Goats	Sheep	Swine
Years of Coaching	.0368*	.0026*	.0371*	.0080*

Note: * $p < 0.05$.

Summary

Conclusions

The typical Oklahoma livestock judging coach is a 40-year-old male teaching in rural Oklahoma with roughly 13 years of livestock coaching experience. Additionally, he participated in livestock judging through FFA and raises either cattle and/or swine. With respect to levels of confidence in evaluation, coaches were typically slightly to moderately confident in goats; moderately confident in sheep; and moderately to extremely confident in cattle and swine. Of the four species, respondents were the least confident in evaluating goats. When looking at specific characteristics across all four species, estimating fat thickness in market animals was respondents' least confident area and assessing volume in breeding animals was respondents' most confident area.

Female coaches are more likely to be confident in evaluating four major criteria in goats and volume in breeding sheep. Additionally, older coaches are more likely to have more confidence in evaluating growth in cattle. Lastly, the more years of coaching

experience the individual has, the greater their overall species confidence is in cattle, goats, sheep and swine. This would fall in line with findings by Layfield and Dobbins (2002), which indicated new coaches with less experience lack the confidence to coach properly.

Recommendations

If perceived self-efficacy is stronger, the goals individuals set for themselves become higher and their desire to stay committed to their goals increases (Bandura, 1991). Non-collegiate livestock judging coaches should be interested in increasing their abilities and coaching confidence to improve their students' potential. To facilitate this, animal science departments and collegiate livestock judging programs can provide greater learning tools and potential instructional clinics for coaches. These should specifically focus on the evaluation of goats and sheep when developing curriculum for a clinic or seminar. A potential specie characteristic area to focus on should be estimating fat thickness in market animals.

As years of coaching increases so does coaches' confidence in evaluating cattle, goats, sheep, and swine. Therefore, curriculum should be developed specifically for younger, less-experienced coaches to help them increase their skills and confidence more quickly.

Future Research

Further research in the interest of understanding confidence among non-collegiate livestock coaches should include expanding this study to other geographic regions or nationwide, gaining a larger population and greater understanding of all coaches, not just those represented in Oklahoma. Additionally, to better see the value of coaching confidence, contest and team results from each coach should be compared to the

confidence levels reported by coaches. A potential qualitative study should interview members of youth teams, asking them to evaluate their coaches' confidence and teaching techniques, and describe how these items affect their abilities as contest participants.

CHAPTER IV

OKLAHOMA NON-COLLEGIATE LIVESTOCK JUDGING COACHES' PERCEIVED TRAINING NEEDS

Abstract

In the area of competitive livestock judging, many non-collegiate coaches entering service or having been coaching for multiple years express a need for greater coaching education programs. By utilizing a needs assessment, Oklahoma State University hopes to better ascertain coaching needs to build curriculum for a livestock coaching education program. The purpose of this study is to identify Oklahoma non-collegiate livestock judging coaches' current teaching tools and future interest in utilizing other coaching tools or attending informational seminars/clinics. Data was collected at the 2017 State Interscholastic livestock judging competition with 46 4-H and FFA livestock judging coaches participating. The typical respondent was 40 years old, male, teaching in rural Oklahoma with roughly 13 years of livestock coaching experience. Current methods most typically used by non-collegiate coaches included personal knowledge, visual live animal evaluation and online videos, with an extreme level of interest from all participants in all anchor points of potential instruction methods to be provided in the future. Coaches were most interested in being provided online videos, a collegiate judging manual or attending a reasons-specific seminar. Respondents specified the most ideal time to hold a seminar/clinic is between the months of June and August, it

should last roughly two days and they would travel up to 199 miles to attend. Age and a desire to have DVD tools had a strong association. Those who have been coaching longer also have a desire to send students to livestock evaluation camps. Additionally, those with a more extensive judging background are more likely to want DVD's, online tools and specie specific seminars. If Oklahoma State University wishes to better facilitate coach learning and needs, special consideration should be taken to not only create more DVD and online tools and provide coaches with our livestock-judging manual, but an education program should focus around reasons or be comprehensive. To ensure attendance, holding this event in the summer months and potentially over a weekend proves to be the most desirable.

Introduction

How important can an educational training program be to teachers or coaches? In the area of competitive livestock judging, many educational tools are provided for students and competitors, but very few opportunities exist for coaches trying to teach participants (B. Bloomberg, personal communication, January 25, 2017). Understanding the importance of these extracurricular activities and how they can propel students to further success beyond graduation, those students who choose to participate beyond the youth level should be provided the best teachers and coaches are available from an early age (Bolton et.al., 2015; Boyd, Herring & Briers, 1992).

Learning and evaluating livestock through competition is a strong component to preparing the next generation of industry professionals to improve the quality of livestock (Nash & Sant, 2005). Even more so, the activity of livestock judging has been proven to make students use mental skills and changing livestock knowledge in high-level decision-making (Meyers, Buorgeois & LeUnes, 2015). Alongside all of these skills, public

speaking ability, dedication, verbal communication, a goal-oriented mindset, and an increase in self-confidence were identified as career and interpersonal assets for which livestock judging participants had an advantage above peer counterparts (Bolton et.al., 2015). Livestock judging, on any level, clearly shapes vital life skills in students; therefore, those who participate at the youth level should be given every opportunity and teaching tool to advance and participate at the collegiate level (Bolton et.al., 2015).

For successful coaching and learning to occur at a non-collegiate level, students and members of the team must see their coach as competent, knowledgeable and having experience (Voight et.al., 2013). Coaching competence is achieved through not only personal motivation but students feeling a coach has the ability to motivate them, as well (Becker & Wrisberg, 2008). In years past, many non-collegiate coaches attributed much of their confidence and personal motivation in evaluation to participation on a collegiate livestock judging team and undergraduate courses at four-year university (Herren, 1984). In a 2013 study of successful FFA Career Development Event coaches, seeing confidence, experience, and knowledge in a coach by team members is what led to the greatest success rate, alongside the greatest degree of learning (Voight et.al., 2013).

Understanding a greater need for effective teaching and for coaches to possess these traits, agricultural teachers with varying levels of experience have indicated a need for greater adult education programs (Layfield & Dobbins, 2002). This goes hand in hand with data showing higher success rates are achieved by coaches with more recent training from sources outside 4-H and FFA (Herren, 1984). In a 2000 study conducted by Maleté and Feltz, coaches were looked at for ability before and after participation in a educational coaching program. Not only were character building, technique, strategy, and motivation all enhanced in coaches who were participants, but also the self-efficacy in

coaching ability was drastically increased with those who had educational training versus those who had none (Malete and Feltz, 2000).

To create programs such as these, understanding the needs of non-collegiate coaches is the key to building a useful teaching curriculum (B. Bloomberg, personal communication, January 25, 2017). Needs assessments are a proven method of determining a strategy to solve problems, ascertaining the costs and benefits of putting a training program together, and creating support in areas where individuals need to build knowledge (Brown, 2002). Skill and knowledge of participants can be evaluated in a needs assessment, ultimately allowing those who create training programs to have a greater focus on providing respondents with exactly what they need from a knowledge standpoint (McClelland, 1992).

Needs assessments, such as the Borich model, can be used to better understand knowledge gaps, piecing together the needs of individuals, which is necessary to not only create an effective education program but, more importantly, determine the effectiveness of a program after implementation (Borich, 1980). When specifically applied to coaching, a needs assessment model can be used to determine coaching preparation tools currently used and how these compare to coaching efficacy of participants, giving coaching programs a stronger reference to create curriculum (Fung, 2003). Researchers found while some areas of coaching maybe strong, those lacking strength can have an overall effect on coaching ability and self-efficacy (Fung, 2003). By implementing a needs assessment to understand where coaches are deficient, researchers could better advise coach educators in mentorship programs and provide valuable information to trainee coaches, establishing a stronger in-service or continuing education program (Fung, 2003).

Identified by Voight et.al. (2013), coaching training and resources are necessary to keep promising coaching practices alive. Expert coaches recommend more training opportunities be provided for coaches on all levels and greater teaching tools and resources be provided, especially to new, inexperienced coaches (Voight et.al., 2013). Considering most youth coaches entering into their service feel unprepared and have a low competency for teaching students in one specific FFA CDE area (Layfield and Dobbins, 2002), what can be done to increase these teachers' knowledge to benefit the youth who choose to participate? Determining the needs of non-collegiate coaches and utilizing a needs assessment to create useful, valuable instructional material is the goal of Oklahoma State University livestock judging staff (B. Bloomberg, personal communication, January 25, 2017); therefore, the objectives of this study include

1. Describe the selected demographics (age, sex, years of experience coaching, judging background, livestock species raised, and location of school) of Oklahoma high school livestock judging coaches attending the 2017 State Interscholastic Livestock Judging Contest.
2. Determine methods currently used to teach livestock judging at the non-collegiate level.
3. Identify teaching methods of interest to non-collegiate livestock judging instructors.
4. Describe the interest level of non-collegiate livestock judging instructors in attending coaches' seminars provided by Oklahoma State University.

5. Determine the relationship between demographics (age, sex, years of experience coaching, judging background, and livestock species raised) and methods of interest.

Conceptual Framework – Needs Assessments

Needs assessments can serve a large purpose in evaluating personnel, assessing the benefits of implementing a training program, and additionally, determining problems within a group of people and then creating the support needed to fix those problems (Brown, 2002). Utilizing needs assessments to create training programs can allow organizations to not only tailor their training to specific employees or individuals, but also to get the greatest value out of their training efforts (McClelland, 1992).

The Borich Needs Assessment Model provides a good outline for the use of needs assessments. Training institutions can utilize a Borich Needs Assessment to gather necessary information in developing a teaching or training program (Borich, 1980). As Borich discusses, the differences between what is and what should be can be determined through utilizing needs assessments, allowing individuals creating educational programs to conceptualize the actual needs of the focus group that maybe attending said program, leading to more effective training (Borich, 1980). It is important to remember, however, the effectiveness of needs assessments is dependent on those participating objectively, looking at their strengths and weaknesses and each individual's subjective abilities (Borich, 1980). Despite this, if conducted correctly, a model such as Borich's can reduce the spread between educational goals of individuals and the actual results trainees get from a educational program (Borich, 1980).

Faculty and instructors, on any level, should have the ability to attend training programs building on skills, confidence, and learning, ultimately allowing them to propel

themselves as teachers (Rocca, 2010). Though training programs can be developed based off what administrators feel are problem areas, this may not lead to an educational course that addresses the true needs of staff members or even individuals within the staff; therefore, a needs assessment can be utilized to truly address what personnel need in this case (Rocca, 2010). With respect to determining the educational needs and tools desired by many secondary agricultural teachers, it is needs assessments, such as the Borich model, that seem to be the most effective in understanding what teachers need to improve their own skills (Edwards & Briers, 1999). Specifically for agricultural educators, “identifiable areas of need may be used as decision rules for determining future resources allocation” (Edwards & Briers, 1999, pg. 2).

Methodology

In consultation with OSU faculty, a researcher-designed instrument was created and used to assess non-collegiate livestock judging coaches’ level of interest to participate in judging education programs and to better understand their needs as coaches.

To understand the coaching styles of respondents, the instrument asked coaches the tools they use to instruct students. Options included (a) personal knowledge, (b) high school judging manual, (c) collegiate judging manual, (d) visual live animal evaluation, (e) personally recorded videos, (f) DVD tools, (g) online videos, (h) sending students to evaluation camps, and (i) other. A Likert-type scale also asked coaches to identify their level of interest in using coaching tools, if provided to them. These items included (a) collegiate judging manual, (b) DVD tools, (c) online videos, (d) sending students to evaluation camps, (e) comprehensive coaches’ seminar/clinic, (f) specie-specific coaches’ seminar/clinic, and (g) reasons-specific coaches’ seminar/clinic. Anchors included *Not*

Interested at All, Slightly Interested, Moderately Interested, Very Interested, and Extremely Interested.

Respondents were asked (1) how much time coaches are willing to spend at a seminar/clinic; (2) what time of the year coaches are most willing to participate; and (3) how many miles coaches would be willing to travel to attend a seminar or clinic. These questions were part of a larger survey instrument as well. Other questions in this instrument sought to assess self-efficacy in evaluation of livestock among non-collegiate livestock judging coaches.

Oklahoma State University policy and federal regulations require a research study involving human subjects to be reviewed and approved before research can proceed. An application was submitted and analyzed by OSU IRB; researchers made corrections, and the instrument was approved June 20, 2016. Reliability of the questionnaire was achieved through a pilot test administered to individuals attending the 2016 Oklahoma State University Livestock Judging camp with students. Face validity was gained through group discussion with pilot survey participants. Participants expressed no issues with the survey instrument. Results were obtained from the pilot ($N = 19$) and reliability was tested using Cronbach's alpha for the main area of the survey instrument: tools (seven items; $\alpha = .86$). A Cronbach's alpha value of 0.70 or above is considered acceptable for any preliminary research, with a coefficient of 0.80 or better for basic research deemed acceptable according to psychometric theory (Nunnally, 1978).

After initial IRB approval, the research design and method of recruitment was then modified to change the population. Re-approval was gained April 6, 2017. The population of this study included Oklahoma non-collegiate livestock judging coaches fielding a 4-H or FFA team at the state qualifying livestock judging contest Saturday,

April 29, 2017 ($N = 84$). A recruitment email was sent to all potential respondents on April 21, 2017, notifying coaches of the study to be conducted and inviting their participation; however, no link to the instrument was included in this email. Following students entering the contest the morning of April 29, coaches were asked to gather in a classroom. They were then provided a visual link to access the instrument. Coaches who completed the instrument on the day of the contest did so prior to the contest starting. The instrument was administered online through the Qualtrics system. The questionnaire could be completed using a computer, tablet or smart phone. The Dillman Tailored Design Method was followed for administering the online questionnaire (Dillman, Smyth, & Christian, 2014).

Following instrumentation during the State Interscholastics, a follow-up email was sent to all participating coaches, including a clickable URL. Those who participated in the survey provided in the email after Monday, May 1, 2017, were considered as late respondents. Those who participated during the state contest, however, were labeled as respondents. These labels were determined before results were calculated. To ensure no overlap occurred in responses between early respondents and late respondents, participants' names and school of instruction was provided in a separate but linked instrument. This instrument entered coaches into a free drawing for OSU livestock judging apparel. The email provided link remained open from May 1, 2017, through Wednesday, May 10, 2017. The comparison of early and late respondents is one of the suggested methods of controlling non-response error (Lindner, Murphy & Briers, 2001). If no differences are found, results can be generalized to a population, yet if differences are determined, these differences should be labeled as limitations to the study (Lindner, Murphy & Briers, 2001).

Of 84 eligible participants, 46 completed the survey, resulting in a 55% response rate. An independent samples t-test compared early and late respondents to gain generalizability. No differences were noted. However, it should be noted, this study was limited to only non-collegiate coaches residing and coaching in Oklahoma. The descriptive statistics used to report the demographic information of the participants and exploratory coaching tools included frequencies, percentages, mean, mode and standard deviation.

To determine if correlations existed among study variables, the researcher ran Chi square tests between qualitative variables and calculated Pearson's correlation coefficients between quantitative variables. Results were measured and those ranging within the 95 percent confidence level ($p < 0.05$) were considered significant.

Results and Discussion

Demographic Characteristics

Respondents ranged in age from 22 to 62 with the typical high school judging coach being 40 years old ($SD = 11.52$). Most coaches were male ($f = 35, 76.09\%$) with only 11 respondents being female (23.91%). Years of coaching experience ranged from one to 42, with a mean years of experience 12.64 ($SD = 11.41$). Judging background for coaches included 4-H ($f = 17, 36.96\%$) or FFA ($f = 32, 69.57\%$), with some experience judging at a two-year college ($f = 21, 45.65\%$) or four-year college ($f = 12, 26.09\%$). Some coaches had no previous judging experience ($f = 3, 6.52\%$). Forty-one respondents indicated they personally raised one or more of four species of livestock. Of those, 32 (69.57%) raised cattle, 7 (15.22%) raised goats, 4 (8.70%) raised sheep, and 22 (47.83%) raised swine, with two respondents (4.35%) indicating they raised horses and/or rabbits. The typical respondent coached in a rural area ($f = 37, 80.43\%$), with seven respondents

indicating instructing in a city area (15.22%) and only one respondent in an urban area (2.17%).

Current Methods of Instruction

Respondents indicated the most frequently used tools for instructing students were personal knowledge ($f=44$, 95.65%), visual live animal evaluation ($f=41$, 89.13%) and online videos ($f=40$, 86.96%). In addition, many coaches indicated sending students to evaluation camps ($f=31$, 67.39%) and utilization of a collegiate judging manual ($f=30$, 65.22%) as tools in highly used for coaching. Personally recorded videos were the least frequently used methods of coaching ($f=3$, 6.52%). Two respondents indicated Other to their current methods of instruction. These responses included “judging pro curriculum and online videos” and “old college judging term books” (see Figure 1).

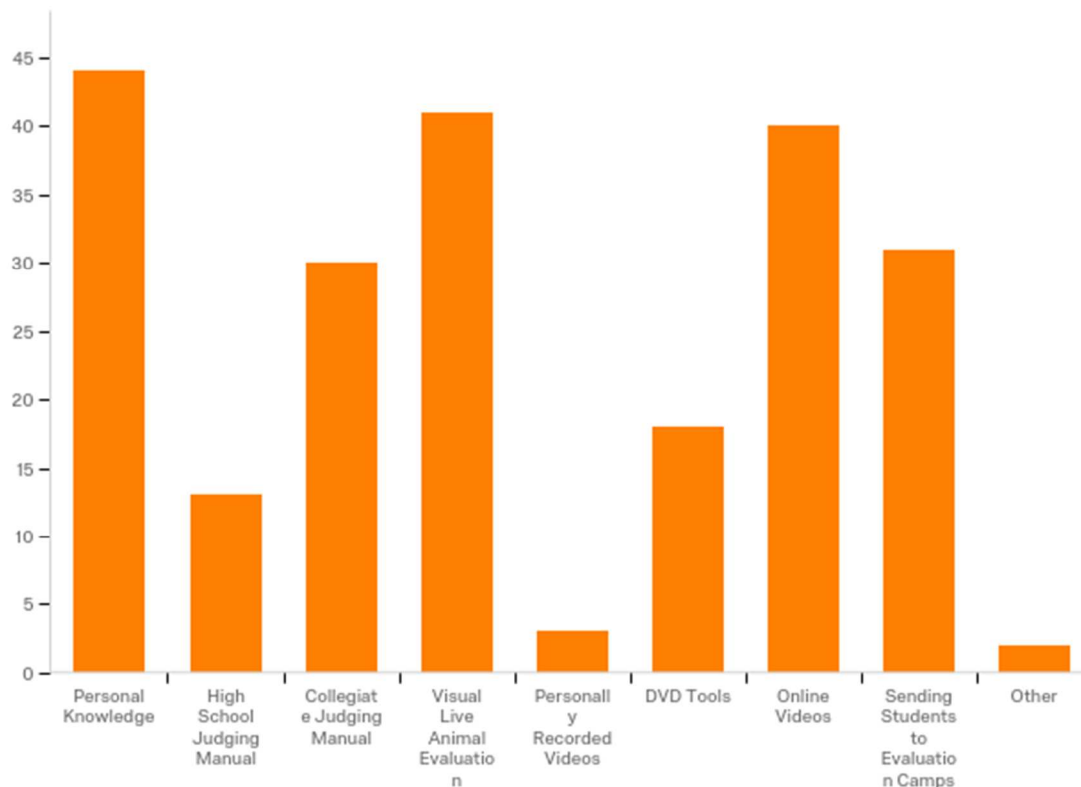


Figure 1. Instructional Tools Used by Non-collegiate Livestock Coaches

Methods of Interest in Instruction

With respect to interest in various training materials, coaches indicated they were from very to extremely interested in all seven areas of potential training methods provided. The level of interest in training tools included extreme interest in a collegiate judging manual ($f = 27, 58.70\%$); extremely interested in DVD tools ($f = 22, 52.38\%$); extremely interested in online videos ($f = 29, 63.04\%$); extremely interested in sending students to evaluation camps ($f = 25, 54.35\%$); very to extremely interested in attending a comprehensive coaches' clinic/ seminar ($f = 22, 47.83\%$); very to extremely interested in attending a specie-specific coaches' clinic/ seminar ($f = 19, 42.22\%$); and extremely interested in attending a reasons-specific coaches' clinic/seminar ($f = 27, 58.70\%$) (see Table 7).

Table 7

Interest in Training Materials

	<i>n</i>	Not interested at all		Slightly interested		Moderately interested		Very interested		Extremely interested	
		<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Collegiate judging manual	46	0	-	3	6.52	3	6.52	13	28.26	27	58.70
DVD Tools	42	1	2.38	3	7.14	6	14.29	10	23.81	22	52.38
Online Videos	46	1	2.17	1	2.17	1	2.17	14	30.43	29	63.04
Sending students to evaluation camps	46	0	-	0	-	8	17.39	13	28.26	25	54.35
Comprehensive coaches' seminar/clinic	46	0	-	2	4.35	9	19.57	13	28.26	22	47.83
Specie-specific coaches' seminar/clinic	45	0	-	1	2.22	9	20.00	16	35.56	19	42.22
Reasons-specific coaches' seminar/clinic	46	0	-	0	-	5	10.87	14	30.43	27	58.70

Note: Modal responses have been highlighted.

Interest Level in Attending Coaching Seminar/Clinic

As stated above, attending a comprehensive coaches' clinic/seminar ($f = 22$, 47.83%); attending a specie-specific coaches' clinic/seminar ($f = 19$, 42.22%); and attending a reasons-specific coaches' clinic/seminar ($f = 27$, 58.70%), have all been indicated as areas of extreme interest for coaches on the non-collegiate level in Oklahoma. In the interest of creating these programs, it was important to determine when coaches would be willing to attend such an event. Participants indicated Summer ($f = 36$, 78.26%) as the most ideal time frame for holding a seminar/clinic. Other responses included Winter ($f = 6$, 13.04%), Fall ($f = 4$, 8.70%), and Spring ($f = 0$, 0.00%). Respondents also indicated having a two-day seminar ($f = 25$, 54.35%) as the most desirable length (see Figure 2). Participants responded that between 100 to 199 miles ($f = 30$, 65.22%) was the greatest distance they would travel for a coaches' seminar/clinic.

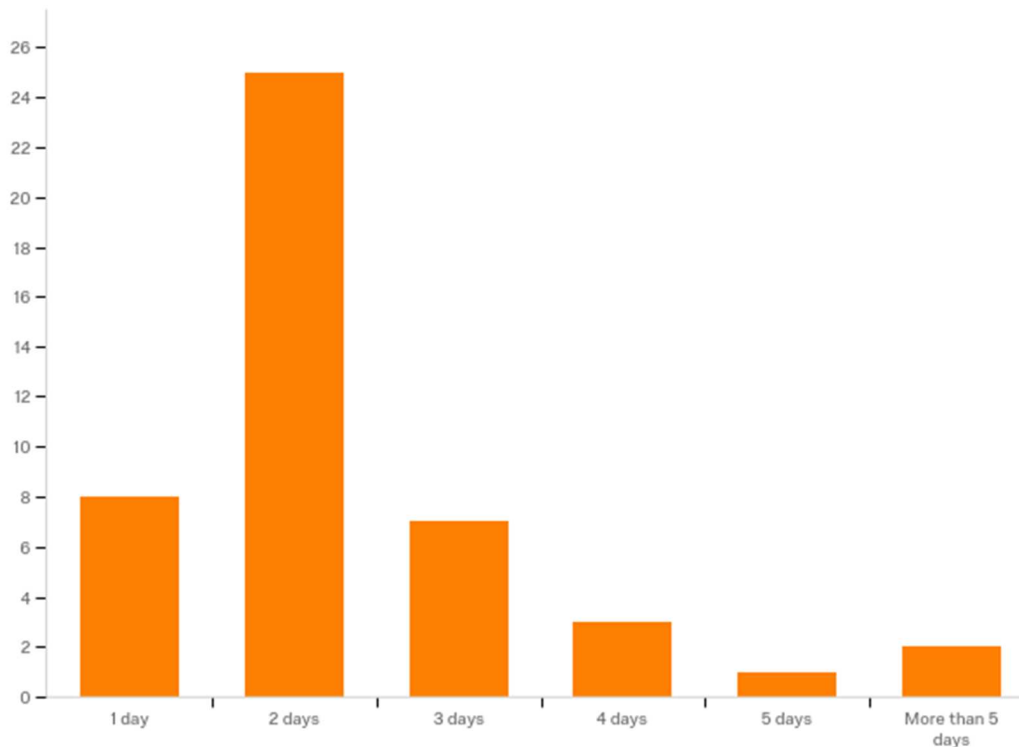


Figure 2. Length of Seminar/Clinic Desired by Non-collegiate livestock coaches.

Correlations Among Demographics and Methods of Interest

A Chi Square test was run to determine if an association was present between respondents' interest in various instruction methods and their age, their sex, their years of coaching experience, their judging background or the species they raised. No significant association was found between sex and methods of interest or species raised and methods of interest.

However, associations between the following study variables were determined to be significant at ($p < 0.05$): age and DVD tools ($p < 0.0437$), years of coaching and sending students to evaluation camps ($p < 0.0111$), judging background and DVD tools ($p < 0.0070$), judging background and online videos ($p < 0.0136$), and judging background and specie specific clinic/seminar ($p < 0.0427$) (see Table 8).

Table 8.

Significant Correlations Between Methods of Interest and Age, Years of Coaching and Judging Background

Variable	Age	Years of Coaching	Judging Background
DVD Tools	.0437*	-	.0070*
Sending Students to Evaluation Camps	-	.0111*	-
Online Videos	-	-	.0136*
Attending specie-specific clinic/seminar	-	-	.0427*

* $p < 0.05$.

Summary

Conclusions

The typical Oklahoma livestock judging coach is roughly 40 years old, male, has an average of 13 years of livestock coaching experience and teaches in rural Oklahoma. Additionally, most personally raise either cattle or hogs and typically participated in competitive livestock judging in FFA. Coaches' most typical method of instruction to students included their own personal knowledge, visual live animal evaluation, and online videos.

Participants are between very and extremely interested in all seven areas of provided methods of instruction with online videos, a collegiate judging manual and attending a reasons-specific coaches' clinic/seminar showing the greatest interest from coaches. This would support findings by Voight et.al. (2013), stating youth coaches desire more learning tools to be provided to them, both experienced and newly started. If a seminar or clinic for Oklahoma coaches were conducted, participants indicated the best time frame would be the Summer, the event should last for two days, and they would be willing to travel between 100 and 199 miles to attend.

Age has a strong correlation to an interest in being provided DVD tools; specifically, as age increased so did the interest in DVDs. Additionally, those having greater years of experience in coaching also have a stronger desire to send students to livestock evaluation camps. Those who had more judging experience in college also desired more DVD tools, online videos and a specie specific seminar/clinic.

Recommendations

To facilitate greater learning for non-collegiate coaches, consideration should be taken to provide items or events that best cater to the stated needs of Oklahoma coaches. Not only should coaches be provided with a collegiate judging manual from which to learn and instruct, but also more online video tools should be provided, either by colleges or associations with a close connection to livestock judging. Creation of DVD tools that are readily accessible for coaches should be a strong consideration, due to high interest, as well as there being a strong association between various demographics and a desire for this method of instruction.

More importantly, if Oklahoma State University wishes to conduct a seminar or clinic, an event primarily focused around teaching and instructing reasons would be the most advantageous. An event such as this should be conducted during a two-day period in the summer months when non-collegiate coaches have more availability. Holding a comprehensive seminar also may prove to attract coaches.

Future Research

In the interest of furthering research in the area of understanding non-collegiate livestock coaches' needs, this study could be expanded to include a larger population spanning through various states or the entire United States. Additional survey instruments could focus on the seminar/clinic portion specifically, focusing on the curriculum desired by coaches, allowing the seminars to be more tailored to specific needs and wants. A pre-test post-test evaluation study of the effectiveness of a seminar or clinic could prove to be the best determinant in understanding what works best for these types of clinics.

CHAPTER V

DISCUSSION AND IMPLICATIONS

Discussion and Implications

Oklahoma State University's greatest goal in helping the next generation of agriculture students is to put together a useful coaching education program that can better bridge the gap of knowledge from the youth to the collegiate level. By using Bandura's Theory of Self-efficacy, along with research on coaching and the importance of teacher confidence, solutions can be provided to promote confidence in non-collegiate coaches. Through the needs assessments, those in the animal science department who are dedicated to the betterment of livestock judging can truly understand the needs of coaches within our own state.

As an individual who grew up livestock judging, participated on two collegiate teams, and now currently serves as an assistant coach at Oklahoma State, I understand what may be seen by some to be an unintentional bias in this study. At the same time, I feel my involvement also makes me more passionate and dedicated to the topic and findings at hand. Not only does the research emphasize just how valuable livestock judging can be, but I can attest from first-hand experience just how much it can impact a person's life. This is why the research we are doing is so valuable and imperative to better understanding livestock judging and building the next generation of influential agricultural minds.

While coaches seem to be confident in their abilities in some areas, knowledge in all areas is insufficient. Even with extra confidence, learning never stops, especially in an industry that is forever evolving. Those who choose to instruct on the collegiate level owe it to those who coach in 4-H and FFA to provide them with all the tools to make students better. By helping those who coach youth, we prepare potential future students of our universities and give youth a head start to being successful. If we can find a way to coach them correctly, giving them the tools to thrive from a young age, their potential when they leave the youth level and enter the collegiate ranks is limitless.

Some may argue not every youth judging livestock at a non-collegiate level may go onto judge past high school graduation. While this is more often than not true, just the act of livestock judging has been proven to improve youth's abilities no matter on what level they participate, as previously stated. Decision making, critical thinking, communications, problem solving - all skills, to just name a few, that are developed through participating in livestock judging. So, why not promote as much learning and skill building as possible in every student, even those who choose not to participate beyond their youth years?

By utilizing every tool at our disposal and gaining a better understanding of what the true needs are, we can ultimately make a difference in future generations. This extends beyond livestock judging. We can better prepare students for careers in agriculture, better prepare the next generation of livestock breeders and better prepare a group of individuals to tackle a changing world. While this particular study may only apply to those who coach in Oklahoma, could it not be applied to coaches across the nation? Could we not take a step toward bettering every livestock-judging contest in our

country? Therefore, eventually bettering all youth who may some day make a difference in the world of agriculture?

Though this study focused on the needs of coaches, it is ultimately the hope that by bettering the instructor we can better the student. In regards to our findings, they are groundbreaking with respect to livestock judging. While many have focused on the benefits livestock judging provides, none have sought to understand what those who participate in this activity need to achieve the highest level of success. It is imperative that research such as this continues to build programs and tools that will promote greater learning and, hopefully, the lasting interest of students who choose to become livestock evaluators.

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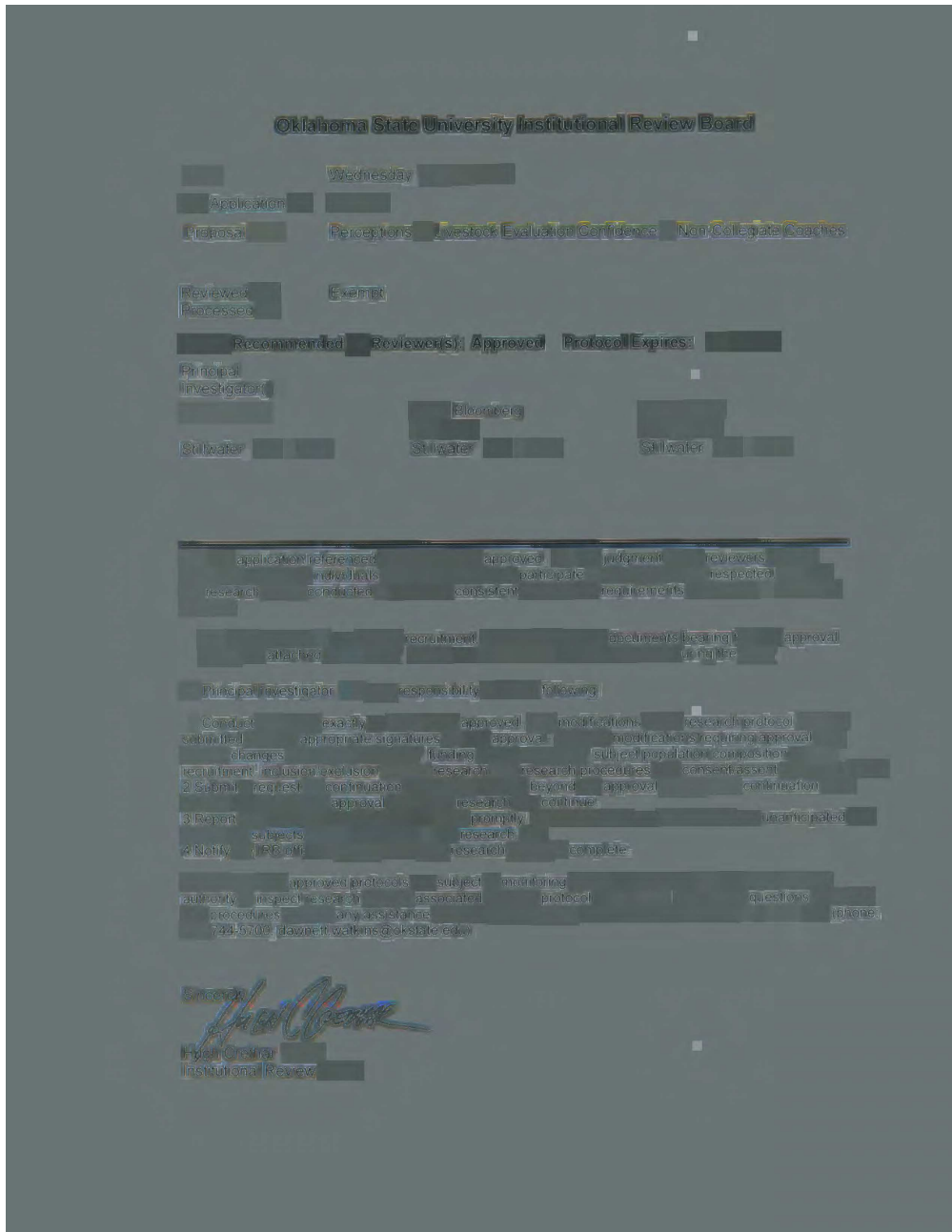
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APPENDICES

APPENDIX A

Initial Institutional Review Board Approval



APPENDIX B

Original Script for Recruitment

PERCEPTIONS OF LIVESTOCK EXTENSION CO. FIDELITY

Graduate student

E

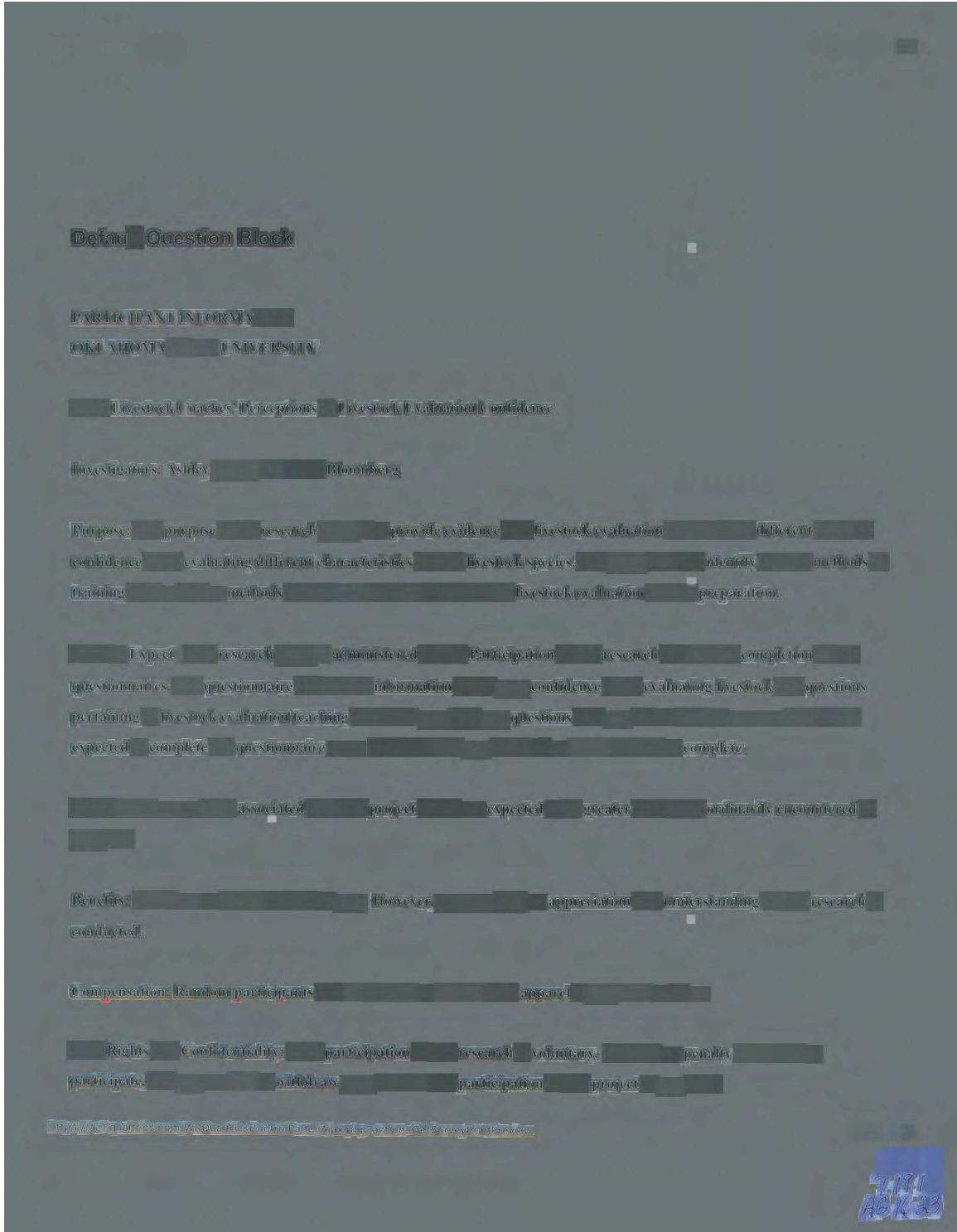
bill

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Okla. State Univ.
IPR
Approved: 7-20-16
Expires: 7-19-19
IPR # AG-16-23

APPENDIX C

IRB Approved Pages of Instrument



Confidentiality _____ private _____ histories
 _____ information _____ identify _____ Research _____ password _____ protected computer
 _____ researchers _____ individuals responsible _____ researchers _____ responsible
 destroyed _____ completed.

Contacts _____ researchers _____ following addresses _____ numbers _____
 _____ participation _____ request information _____ Rhombert
 _____ Science, Oklahoma _____ University, Stillwater, _____ 744-9380 _____ questions
 _____ research volunteer, _____ Stillwater, _____ 744-3377
 info@okstate.edu

_____ participate _____ participate _____ checking _____ indicating
 _____ voluntarily _____ participate _____ acknowledge

_____ livestock _____ uation coach, how confident _____ your _____ accurately
 evaluate _____ characteristics _____ CATTLE.

	Severely Lacking Confidence	Moderately Lacking Confidence	Slightly Lacking Confidence	Slightly Confident	Moderately Confident	Extremely Confident
Identifying structural correctness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visualizing reference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Evaluating appropriate muscle definition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Estimating appropriate thickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assessing volume breeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Determining growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

_____ livestock _____ uation coach, how confident _____ your _____ rately

https://oqi.qualtrics.com/jV9Q/af/framesControlPanel.aspx?app=okstate-06152019&report=ev

30%
 5/17/17
 AG-16-03

APPENDIX D

Instrument

Livestock Coaches' Perceptions of Livestock Evaluation Confidence - April 29, 2017

Start of Block: Default Question Block

Q1 PARTICIPANT INFORMATION Oklahoma State University Title: Livestock Coaches' Perceptions of Livestock Evaluation Confidence **Investigators:** Ashley Judge, Dr. Blake Bloomberg and Dr. Shelly Sifton **Purpose:** The purpose of the research study is to provide evidence that livestock evaluation coaches have different levels of confidence when evaluating different characteristics of each livestock species. The study also will identify current methods of training used as well as methods desired to be used in the future for livestock evaluation contest preparation. **What to Expect :** This research study is administered online. Participation in this research will involve completion of two questionnaires. The questionnaire will ask for information about your confidence when evaluating livestock and questions pertaining to livestock evaluation teaching tools. You may skip any questions that you do not wish to answer. You will be expected to complete the questionnaire once. It should take you about 10 or fewer minutes to complete. **Risks:** There are no risks associated with this project which are expected to be greater than those ordinarily encountered in daily life. **Benefits:** There are no direct benefits to you. However, you may gain an appreciation and understanding of how research is conducted. **Compensation:** Random participants will be selected to receive OSU apparel if they wish to do so. **Your Rights and Confidentiality:** Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time. **Confidentiality :** The records of this study will be kept private. Any written results will discuss group findings and will not include information that will identify you. Research records will be stored on a password protected computer in a locked office and only researchers and individuals responsible for research oversight will have access to the records. Data will be destroyed three years after the study has been completed. **Contacts :** You may contact any of the researchers at the following addresses and phone numbers, should you desire to discuss your participation in the study and/or request information about the results of the study: Blake Bloomberg, Ph.D., 109 ANSJ, Dept. of Animal Science, Oklahoma State University, Stillwater, OK 74074, 405-744-9280. If you have questions about your rights as a research volunteer, you may contact the IRB Office at 223 Scott Hall, Stillwater, OK 74078, 405-744-3377 or irb@okstate.edu **If you choose to participate:** Please, click NEXT if you choose to participate. By clicking NEXT, you are indicating that you freely and voluntarily and agree to participate in this study and you also acknowledge that you are at least 18 years of age.

Page 1 of 11

Q22 As a livestock evaluation coach, how confident are you in your ability to accurately evaluate the following characteristics in CATTLE.

	Severely lacking in confidence (1)	Moderately lacking in confidence (2)	Slightly lacking in confidence (3)	Slightly confident (4)	Moderately confident (5)	Extremely confident (6)
Identifying structural correctness (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visualizing proper balance (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluating appropriate muscle definition (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estimating appropriate fat thickness in market steers (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing volume in breeding cattle (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determining growth (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page 2 of 11

Q21 As a livestock evaluation coach, how confident are you in your ability to accurately evaluate the following characteristics in SWINE.

	Severely lacking in confidence (1)	Moderately lacking in confidence (2)	Slightly lacking in confidence (3)	Slightly confident (4)	Moderately confident (5)	Extremely confident (6)
Identifying structural correctness (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visualizing proper balance (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluating appropriate muscle definition (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estimating appropriate fat thickness in market hogs (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing volume in breeding gilts (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determining growth (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page 3 of 11

Q2 As a livestock evaluation coach, how confident are you in your ability to accurately evaluate the following characteristics in SHEEP.

	Severely lacking in confidence (1)	Moderately lacking in confidence (2)	Slightly lacking in confidence (3)	Slightly confident (4)	Moderately confident (5)	Extremely confident (6)
Identifying structural correctness (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visualizing proper balance (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluating appropriate muscle definition (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estimating appropriate fat thickness in market lambs (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing volume in breeding sheep (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determining growth (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page 4 of 11

Q20 As a livestock evaluation coach, how confident are you in your ability to accurately evaluate the following characteristics in GOATS.

	Severely lacking in confidence (1)	Moderately lacking in confidence (2)	Slightly lacking in confidence (3)	Slightly confident (4)	Moderately confident (5)	Extremely confident (6)
Identifying structural correctness (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Visualizing proper balance (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Evaluating appropriate muscle definition (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estimating appropriate fat thickness in market goats (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assessing volume in breeding does (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determining growth (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6 Which of the following do you currently use to instruct students in livestock evaluation? Check all that apply.

- Personal Knowledge (1)
- High School Judging Manual (2)
- Collegiate Judging Manual (3)
- Visual Live Animal Evaluation (4)
- Personally Recorded Videos (5)
- DVD Tools (6)
- Online Videos (7)
- Sending Students to Evaluation Camps (8)
- Other (9) _____

Q8 How interested would you be in using each of the following tools to teach livestock evaluation?

	Not interested at all (1)	Slightly interested (2)	Moderately interested (3)	Very interested (4)	Extremely interested (5)
Collegiate Judging Manual (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
DVD Tools (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online Videos (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sending Students to Evaluation Camps (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comprehensive Coaches' Seminar/Clinic (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specie-specific Coaches' Seminar/Clinic (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reasons-specific Coaches' Seminar/Clinic (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 How much time would you be willing to spend at a livestock coaching seminar/clinic?

- 1 day (1)
- 2 days (2)
- 3 days (3)
- 4 days (4)
- 5 days (5)
- More than 5 days (6)

Q19 During what time of the year would you be most willing to participate in a livestock coaching seminar/clinic?

- Spring (March - May) (1)
- Summer (June - Aug) (2)
- Fall (Sept - Nov) (3)
- Winter (Dec - Feb) (4)

Q10 How many miles would you be willing to travel to attend a livestock coaching seminar/clinic?

- 0-49 miles (1)
- 50-99 miles (2)
- 100-199 miles (3)
- 200-300 miles (4)
- 300+ miles (5)

Q11 Sex

- Male (1)
- Female (2)



Q12 Age

Q13 In which state do you currently reside?

▼ Alabama (1) ... I do not reside in the United States (53)

Q14 Which of these describes the demographic area in which you teach?

- Rural (Below 10,000) (1)
- City/Town (10,000-49,999) (2)
- Urban (50,000-99,999) (3)
- Metropolitan (100,000+) (4)

Q16 At what level did you personally compete in livestock judging? Check all that apply.

- 4-H (1)
- FFA (2)
- 2-year college (3)
- 4-year college (4)
- I did not compete on a livestock team. (5)



Q15 How many years have you been a livestock judging coach?

Q19 How often do you meet with your livestock judging students to practice? (ex. daily, # of days per week, weekly, monthly, bi-monthly, etc.)

Q17 Do you raise livestock?

- Yes (1)
- No (2)

Q18 If so, what species of livestock do you raise? Check all that apply.

- Cattle (1)
- Swine (2)
- Sheep (3)
- Goats (4)
- Other (5) _____
- Other (6) _____
- Other (7) _____

End of Block: Default Question Block

APPENDIX E

Linked Survey for Drawing

Linked survey for drawing - Coaches - April 29, 2017

Start of Block: Default Question Block

Q2 Thank you for participating in this study. By providing your name, hometown and student organization below, you will be included in a drawing for an OSU Animal Science cap or similar prize. Your name will not be shared with anyone other than the researchers, but it may be announced if you are chosen as a drawing winner. Good luck!

Your Full Name (1) _____

Your School or County (2) _____

Your Chapter or Club Name (4)

End of Block: Default Question Block

APPENDIX F

IRB Approved Modification Form

Oklahoma State University Institutional Review Board

Date: Thursday, April 06, 2017 Protocol Expires: 7/19/2019
IRB Application No: AG1623
Proposal Title: Perceptions of Livestock Evaluation Confidence in Non-Collegiate Coaches
Reviewed and Processed as: Exempt
Modification
Status Recommended by Reviewer(s) **Approved**
Principal Investigator(s):
Ashley Judge Blake Bloomberg Shelly Sitton
Stillwater, OK 74078 109 ANSI 435 Ag Hall
Stillwater, OK 74078 Stillwater, OK 74078 Stillwater, OK 74078

The requested modification to this IRB protocol has been approved. Please note that the original expiration date of the protocol has not changed. The IRB office MUST be notified in writing when a project is complete. All approved projects are subject to monitoring by the IRB.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

The reviewer(s) had these comments:

Mod to reduce number of participants to 75, collect data on Saturday April 29, 2017 at the OSU FFA Interscholastics livestock judging contest and to send an email to coaches one week prior to the state contest.

Signature :



Hugh Crethar, Chair, Institutional Review Board

Thursday, April 06, 2017
Date

APPENDIX G

Recruitment Email

TO: Coaches of Livestock Judging Teams
FROM: Ashley Judge, Assistant Livestock Judging Coach
COPY: Shelly Sitton, Blake Bloomberg and Rusty Gosz - OSU CASNR Faculty
RE: Coaches research to be conducted April 29, 2017, at the OSU livestock judging contest
DATE: April 24, 2017

Understanding the needs of high school livestock judging coaches is of the utmost importance to those involved in the judging program at Oklahoma State University. Not only do we want to provide coaches with the tools to better their programs, but we also want to understand what those needs are.

My name is Ashley Judge, and I am an agricultural communications graduate student and the assistant livestock judging coach at Oklahoma State. For my graduate work, Dr. Blake Bloomberg, Dr. Shelly Sitton and I would like to survey high school coaches about your perceived strengths and weaknesses, which will allow us to better understand what we can do to help you with coaching/teaching livestock evaluation.

After you enter your students in the contest Saturday morning, please go to the classroom in Totusek Arena, formerly known as the OSU Animal Science Arena. Coffee and donuts will be provided. At 7:30 a.m., I will explain the survey, and it should take no longer than 10 minutes to complete on your phone, iPad, etc. Additionally, all of you who complete the survey may enter yourself to win various OSU apparel, OSU livestock judging manuals and other items from the judging program.

If you could all help us by participating in this study, we would greatly appreciate it! Not only will it help us better understand your needs, but also we hope it will allow us to give back to you, as well.

Good luck this weekend, and we are excited to see you at the contest!

Ashley Judge

APPENDIX H

Follow-up Email

TO: Coaches of Livestock Judging Teams
FROM: Ashley Judge, Assistant Livestock Judging Coach
COPY: Shelly Sitton, Blake Bloomberg and Rusty Gosz - OSU CASNR Faculty
RE: Follow-up research from Interscholastic Judging Competition
DATE: May 1, 2017

First and foremost, thank you for participating and bringing your team to the state livestock judging competition, Saturday, April 29. It was a great turnout. We felt the quality of livestock we provided was exceptional, and we hope your teams got the most out of it. Congratulations to all those who did well!

On Saturday morning, we conducted a survey of coaches who had teams participating, and understanding many of you also had other obligations, we know we did not get to survey all of those who attended. Would you please take 10 minutes to participate in this survey now using the link below.

[Insert link here.](#)

If you could help us by participating in this study, we would greatly appreciate it! Your responses will give us more accurate data, allowing the results to be more specific and giving us a better idea of what we can do to help you as coaches.

I appreciate all your time and efforts into improving the youth of Oklahoma and hope you will help us in improving our efforts, as well!

Thank you,

Ashley Judge

VITA

Ashley Renee Judge

Candidate for the Degree of

Master of Science

Thesis: OKLAHOMA NON-COLLEGIATE LIVESTOCK JUDGING
COACHES' PERCEIVED CONFIDENCE AND TRAINING NEEDS

Major Field: Agricultural Communications

Biographical:

Education:

Completed the requirements for the Master of Science in Agricultural Communications at Oklahoma State University, Stillwater, Oklahoma in December, 2017.

Completed the requirements for the Bachelor of Science in Animal Science and Agricultural Communications at Oklahoma State University, Stillwater, Oklahoma, 2015.

Experience:

Served as Assistant Livestock Judging Team coach for Oklahoma State University from January 2015 to December 2017.

Employed as Social Media Specialist for ADM MoorMan's ShowTec from March 2016 to March 2017.

Professional Memberships:

Agricultural Communicators of Tomorrow
American Angus Association
Oklahoma State Block and Bridle