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Identifying Leadership Perceptions of Desired Competencies of Agricultural Sales Students and Agricultural Sales Industry Professionals

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Identifying Leadership Perceptions of Desired Competencies of Agricultural Sales Students and
Agricultural Sales Industry Professionals

Identifying Leadership Perceptions of Desired Competencies of Agricultural Sales Students and
Agricultural Sales Industry Professionals

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

by

Sarah Wright
University of Arkansas
Bachelor of Science in Agricultural Education, Communications and Technology, 2013

July 2015
University of Arkansas

This thesis is approved for recommendation to the Graduate Council.

Dr. Jill Rucker
Thesis Director

Dr. H.L. Goodwin
Committee Member

Dr. Jefferson Miller
Committee Member

Abstract

The two articles presented in this thesis used both quantitative and qualitative research methods to evaluate competencies among agricultural business students and agricultural sales professionals respectively. In the first study, students enrolled in the Fall 2014 agribusiness sales course at [State] University ($n = 97$), participated in a pre and post evaluation comprised of leadership assessments to determine the change in introversion and extroversion, task-oriented and relationship-oriented, and finally strength characteristics over the time period of an academic semester. Students presented to be from a variety of leadership backgrounds. Posttest results reported students being both high task (62.89%) and high relationship oriented (48.45%). There was slight shift from introversion to extraversion, $r=.390$, $p=<.05$. The Strengths Finder assessment identified, the top five students' strengths as Belief, 47.42% ($n = 46$), Responsibility, 30.93% ($n = 30$), Significance, 30.93% ($n = 30$), Relator, 29.90% ($n = 29$), and Self-Assurance, 25.77% ($n = 25$).

In the second study, a modified Delphi analysis was conducted to find a consensus of competencies desired by agricultural sales professionals for incoming graduates to be potential sales professionals. Additionally sales professionals were asked what topics should be included in the curriculum of the sales course. This identification should be used to ensure there is not a gap between education and industry. The Delphi study included three questions in an initial round, of the 40 sales professionals, 36 data sets were usable. Those individuals served as the participants for rounds two and three. The generalizations made from the results of round one, brought eight to nine themes for each of the three questions. The second round of the study had the participants rank the themes from round one in order of importance from first to last. Integrity ranked significantly higher than most other traits in all three questions, while other

traits varied through the surveys. The third and final round asked participants to agree or disagree with the ranking. The findings of the study concluded in a successful consensus of each survey question with over 90% agreeability for each group of rankings.

Acknowledgements

For starters, I would like to thank my committee chair, graduate advisor, counselor, friend, and more Dr. Jill Rucker. Dr. Rucker, without your continuous push for me to do better, your strong shoulder to hold me up, and your contagious smile, I would not be here putting these final touches on my thesis. I can't think of someone who I would have wanted to walk me through the last couple of years other than you. Thank you for always believing in me.

A BIG thank you to Team Rucker – Dr. Rucker and Jackson Alexander, you two are the greatest teammates I could ask for. I am so glad we have had each other through these last couple of years.

I would also like to thank the other members of my committee, Dr. H. L. Goodwin and Dr. Miller. I am very thankful for the guidance you have given me throughout my life, and here as my time as a graduate student. I appreciate your positivity and encouragement during this journey.

I have had wonderful advisors and professors along my education path. Thank you Dr. Don Edgar for your open door and your constant guidance. I appreciate your listening ear and advice when I come to you with any question or life crisis. Dr. Donna Graham, I am thankful for your hugs and reassurance and always finding a teachable moment. Casandra Cox, thank you for always allowing me to run into your office when I needed something, call you in a tizzy, or steal a piece of candy to calm my nerves.

Dr. Kate Shoulders, Dr. Don Johnson, and Dr. Leslie Edgar, your classes always pushed me to give my best effort and go further than I thought I could. Thank you for pouring your knowledge out and helping me to be a better student.

Dr. Wardlow, you've given me many laughs and memories. I am thankful to have a Department Head who is concerned with my wellbeing and I appreciate you wanting to help me find ways to better myself.

As for all the other graduate students in the AECT department who have walked with me on this journey, kudos to you for putting up with me in my moments of stress and despair. I am thankful for the friendships I have made and have enjoyed our moments together, good, bad and in between.

The same goes to my family and friends; I am forever in debt to you each for your sweet gifts of chocolate, Icee's uplifting words, notes, and much, much more when my days and nights meshed together and my stress level was unbearable. I am forever grateful that God placed each of you in my life.

Dedication

This thesis is dedicated my parents, big sister, and the late Dr. Nolan Arthur. Mommy and daddy, thank you for raising me in a loving home and teaching me to rely on Christ in all areas of life. I can never repay you for always putting my education, my passions and me, first. I will always cherish the many memories we have together from the show ring to the miles riding in the truck and my many blonde moments to funny family dinners. Mommy, you truly are my very best friend. I am happy that I am becoming more and more like you because you've taught me to be a strong, independent woman, but to have a big heart ready to help others. Daddy, you've always told me I can be whoever I want to be, and I just hope I get to be half the person you are. You have taught me to be a hard-working and dedicated person in all that I do. I promise, no matter where I go in life, I will always remember where I came from and I will always be your "babygirl".

Sissy, thank you for always being up for having fun and being the number one fan in my cheering section. I hope you know how proud I am of you and that your dedication and desire to be great is a constant push for me to give my all in what I do. Thank you for laughing with me and at me when the moment calls for it.

Dr. Nolan Arthur, or better known to me as Mr. Nolan, you are missed dearly. Thank you for having a dream for me to attend the University of Arkansas and study Agricultural Education. Thank you for always wanting the best for me through my education and through my experiences in the barn and show ring. You showed me the picture of a bright future and paved a way for me to achieve it. Thank you for always believing in me and my family!

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CHAPTER I: INTRODUCTION

Need for the Study

Over the past decade, the term “leader” has become a buzzword. Previous studies have been conducted to differentiate the terms leader, manager, and follower (Zaleznik, 1977; Daft, 2010; Kotter, 1998). The term leader is so popular when entered in a Google search; the search engine yields 947,000,000 results in 0.82 seconds (personal search, 2015). Similarly, the term “leadership” fosters 491,000,000 results in 0.49 seconds (personal search, 2015). Riggio (2013) claims the majority of knowledge about leaders and leadership is wide spread. While both terms are immensely popular and used throughout society and pop culture, there is not a clear definition for either term.

It is agreed upon in literature there is no clear and distinct definition of leadership (Haber & Komives, 2009; Huber, 2002; Ricketts & Bruce, 2008; Nahavandi, 2006). There are various definitions of the terms dependent to the discipline and context in which they are used. However, the term leadership is familiar to most and the majority of society can concoct a working definition based on his or her perspective and personal context (Huber, 2002).

Today’s universities have a common goal – to prepare students to successfully enter the workforce. This means educators should reinforce leadership concepts and competencies to educate students to be leaders in their homes and communities (Holzweiss, Parrott, & Cole, 2013). In a higher education setting, these goals are strategically achieved through formal education including courses in leadership, communications, and ethical theory, as well as experiential learning including internships, study abroad programs, and leadership positions held within student organizations. While leadership education can be deliberate, the majority of

students are informally exposed to leadership competencies through courses where leadership is not the focus.

In 2011, Michigan State University, the Association of Public and Land-Grant Universities (APLU), and the University Industry Consortium (UIC) conducted a nation-wide study to determine the detailed soft skills desired by employers. For the purpose of this study, researchers interviewed faculty, students, and industry professionals. The survey analyzed seven Soft Skill Clusters and then further broke down the clusters asking employers to rank the most important details for each soft skill. Among the leadership skills cluster, the top ranked needs for a potential employee included:

- See the “big picture” and think strategically
- Recognize when to lead and when to follow
- Respect and acknowledge contributions from others
- Recognize and deal constructively with conflict
- Build professional relationships
- Motivate and lead others
- Recognize when change is needed and lead the change effort (Crawford, Lang, Fink, Dalton & Fielitz, 2011, p. 9).

This study demonstrated a need for educators to place special emphasis on the development of leadership competencies. In the business world, “leadership is required at more than one level in an organization” (Minkes, Small & Chatterjee, 1999, p. 327). Therefore, employers are seeking college graduates who are well-rounded individuals who have a general knowledge base from their education, who possess proven leadership characteristics, and who can contribute specific skills and traits for the job at hand. When it comes to skills and

knowledge that individuals need to be “successful and contributing members of today’s global economy,” through content specific and leadership competencies (Hart, 2006, p. 1).

Problem Statement

This thesis is comprised of two individual studies. There is a current need to identify the gap between education and industry. With a continually changing and advancing society, it is important to evaluate competencies students are gaining and adapt them to the desires of the industry through education (DuPre & Williams, 2011; Farrell, 2007; Graham, 2001). Many research studies strive to answer what skills employers for incoming employees who have recently graduated desire; this is an ever-growing research area (Crawford, Lang, Fink, Dalton & Fielitz, 2011, p. 9).

Purpose Statement

Competencies of Agricultural Sales Students

The purpose of this study is to assess and identify leadership trait and characteristic growth demonstrated by students enrolled in the Fall 2014 Agribusiness Sales course offered at [State] University.

Competencies Desired by Agricultural Sales Professionals

The purpose of this study is to utilize agricultural sales professionals to identify the desired leadership competencies in a successful sales career.

Objectives

Competencies of Agricultural Sales Students

1. Determine demographics of agricultural sales students;
2. Determine leadership competencies of agricultural sales students;
3. Determine students’ previous leadership experiences; and

4. Develop components of students' definition of leadership.

Competencies Desired by Agricultural Sales Professionals

1. Determine demographics of agricultural sales professionals;
2. Develop a consensus of desired competencies to be deemed successful in the agricultural sales profession; and
3. Determine curriculum topics that should be included in an Agribusiness sales course.

Terms

Competencies – skills and traits a person gain through education and experience to prepare them for professional careers (Bowden & Masters, 1993).

Extravert – preference for obtaining information, inspiration, and energy from outside the self and gathering energy from social atmospheres (Northouse, 2013).

Introvert – one who internally derives energy and is drained by too much social interaction (Northouse, 2013).

Leadership (in education) – a process whereby an individual influences a group of individuals to achieve a common goal (Northouse, 2013, p. 5).

Leadership (in sales) – activities performed by those in a sales organization to influence others to achieve common goals for the collective good of the sales organization and company (Ingram, LaForge, Locander, MacKenzie & Podsakoff, 2005, p. 137).

Relationship-Oriented – individuals who are more concerned with developing close interpersonal relationships (Northouse, 2013, p. 124).

Skill – characteristics that have been acquired overtime from education and environmental influences (Northouse, 2013).

Task-Oriented – individuals who are primarily concerned with reaching a goal (Northouse, 2013).

Trait – innate characteristic an individual is born with (Northouse, 2013).

Assumptions

Competencies of Agricultural Sales Students

1. It is assumed all subjects answered the survey questions truthfully and to the best of their ability.
2. Subjects of the study were representative of the Fall 2014 Agribusiness Sales course at [State] University. Therefore, it is assumed participants accurately represent this subject area.

Competencies Desired by Agricultural Sales Professionals

1. It is assumed all subjects answered the survey questions truthfully and to the best of their ability.
2. It is assumed subjects of the study were representative of the general sales industry professionals.

Limitations

Competencies of Agricultural Sales Students

When reading or repeating this study, it is important to remember the population of the study was only students enrolled in the Agribusiness Sales course at [State] University and

findings should not be generalized to students outside of this course subject. Also, because this study is qualitative in nature there may be researcher biases in qualitative questions.

Competencies Desired by Agricultural Sales Professionals

There are researcher biases in qualitative contexts throughout this study. The instrumentation used for this study was developed by the researcher and evaluated by an executive committee. The instrumentation was not pilot tested before dissemination, therefore reliability is limited.

Statement of Reflexivity

As the researcher of these studies, I acknowledge that I enter the project with my own views of the world and the agriculture industry and therefore I have assumptions and biases. I was born and raised in Northwest Arkansas on a family farm running a diverse livestock operation. I hold agricultural education through both the classroom and industry pathways close, and have a deep appreciation for the discipline.

I have experience as a student and a teacher in this field, and now being in the role of the researcher, I have a deeper understanding of the research process and the attentiveness to detail needed to complete a successful research project. This also leads me to understand I may bring personal biases into the project as I have my own ideas of how the classroom works based on my own experiences.

As the researcher, I am hopeful to have a positive response rate for both studies to help gain an understanding of the students engaged in agricultural sales and how their competencies will be a strong foundation for the desire of the industry. I understand the sensitivity of this information as both sets of participants will give demographic information and personal, biased

thoughts for what the industry is looking for in upcoming employees and may not want any personal identifiers to link them to their information. With this being said, participants have been notified their information will remain completely anonymous and therefore I hope all answers recorded are accurate and honest.

Institutional Review Board

In compliance with the policies of the University of Arkansas and federal regulations, research pertaining human subjects is required to be submitted, reviewed and approved previous to research completion. Following this policy, this study was approved by the University of Arkansas IRB office and granted permission to proceed the gathering of data. The approval numbers provided for this research are: 14-10-212 for Article I, *Competencies of Agricultural Sales Students* (Appendix A) and 14-10-213 for Article II, *Competencies Desired by Agricultural Sales Professionals* (Appendix B, C, D). Because of the nature of the Delphi study for Article II, modifications were made to disseminated surveys for each round and, therefore, required repeated IRB approval.

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Appendices

Appendix A

Competencies of Agricultural Sales Students IRB Approval



UNIVERSITY OF ARKANSAS

Office of Research Compliance
Institutional Review Board

November 6, 2014

MEMORANDUM

TO: Sarah Wright
Jill Rucker

FROM: Ro Windwalker
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 14-10-212

Protocol Title: *Self-Perceived Leadership Competencies among Agricultural Sales Students: A Post-Then Study*

Review Type: EXEMPT EXPEDITED FULL IRB

Approved Project Period: Start Date: 11/06/2014 Expiration Date: 11/05/2015

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (<https://vpred.uark.edu/units/rscp/index.php>). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 135 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior* to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.

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

Appendix B
Competencies Desired by Agricultural Sales Professionals
IRB Approval Round 1



November 6, 2014

MEMORANDUM

TO: Sarah Wright
Jill Rucker

FROM: Ro Windwalker
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 14-10-213

Protocol Title: *Desired Leadership Competencies among Agricultural Sales Professionals: A Delphi Study*

Review Type: EXEMPT EXPEDITED FULL IRB

Approved Project Period: Start Date: 11/06/2014 Expiration Date: 11/05/2015

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (<https://vpred.uark.edu/units/rscp/index.php>). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 40 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior* to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.

Appendix C

Competencies Desired by Agricultural Sales Professionals

IRB Modification Approval Round 2



December 15, 2014

MEMORANDUM

TO: Sarah Wright
Jill Rucker

FROM: Ro Windwalker
IRB Coordinator

RE: PROJECT MODIFICATION

IRB Protocol #: 14-10-213

Protocol Title: *Desired Leadership Competencies among Agricultural Sales Professionals: A Delphi Study*

Review Type: EXEMPT EXPEDITED FULL IRB

Approved Project Period: Start Date: 12/15/2014 Expiration Date: 11/05/2015

Your request to modify the referenced protocol has been approved by the IRB. **This protocol is currently approved for 40 total participants.** If you wish to make any further modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

Please note that this approval does not extend the Approved Project Period. Should you wish to extend your project beyond the current expiration date, you must submit a request for continuation using the UAF IRB form "Continuing Review for IRB Approved Projects." The request should be sent to the IRB Coordinator, 210 Administration.

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

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.

Appendix D

Competencies Desired by Agricultural Sales Professionals

IRB Modification Approval Round 3



March 19, 2015

MEMORANDUM

TO: Sarah Wright
Jill Rucker

FROM: Ro Windwalker
IRB Coordinator

RE: PROJECT MODIFICATION

IRB Protocol #: 14-10-213

Protocol Title: *Desired Leadership Competencies among Agricultural Sales Professionals: A Delphi Study*

Review Type: EXEMPT EXPEDITED FULL IRB

Approved Project Period: Start Date: 03/17/2015 Expiration Date: 11/05/2015

Your request to modify the referenced protocol has been approved by the IRB. **This protocol is currently approved for 40 total participants.** If you wish to make any further modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

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

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

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

CHAPTER II: SELF-PERCEIVED LEADERSHIP COMPTENCIES AMONG AGRICUTUAL SALES STUDENTS

Abstract

This study was designed to evaluate students (n=97) enrolled in an agricultural sales course offered at [State] University to determine if the course content (sales) influenced their leadership skills as related to the profession of agricultural sales. The findings of this study indicate 94.85% of students believed there was a connection between leadership and sales. Leadership is a process that builds over time. As a process, leadership skills can be cultivated within the classroom over the course of a semester. Through a series of personality and leadership assessments, students in the sale course were characterized as high task, (62.89%) and high relationship oriented (48.45%). Pre and post-test data proved a slight shift from introversion to extraversion, $r=.390$, $p<.05$ and concluded that the top five characteristics of students' strengths were Belief (47.42%, n=46), Responsibility (30.93%, n=30), Significance (30.93%, n=30), Relator (29.90%, n=29), and Self-Assurance, (25.77%, n=25). Students' demographic data were also analyzed. Most students (n=54) were junior status in the College of Agricultural Sciences and Natural Resources (n=96), majoring in Agricultural Business (n=39) and/or Animal Science (n=29), and grew up on a rural farm (n=68). Students were also engaged in various previous leadership experiences such as FFA (81.44%), 4-H (32.99%), and sports teams (47.42%), where they held many officer positions.

Introduction

In today's society, new leaders are needed to step up into leadership roles and build relationships within communities (Ricketts & Bruce, 2008). Therefore, educational leadership programs and opportunities are being established in universities widely across the nation. These opportunities for students to engage in leadership, both formally and informally, give students the ability to develop and sharpen skills needed for their desired future occupations (Blackwell, Cummins, Townsend & Cummings, 2007). "Our rapidly changing society desperately needs skilled leaders who are able to address complex issues, build bridges, and heal divisions" (Astin & Astin, 2000, p. 31).

Preparing students to successfully enter the workforce is the concrete goal of university programs, and research shows individuals with leadership skills and traits are those who are desired by employers (Ricketts & Bruce, 2008; Graham, 2011; Morgan, King, Rudd, & Kaufman, 2013). This leads to the observation that educators should reinforce leadership concepts and competencies to educate students to be leaders in their homes and communities (Holzweiss, Parrott, & Cole, 2013). In a higher education setting, these goals are strategically achieved through formal education including courses in leadership, communications, and ethical theory, as well as experiential learning including internships, study abroad programs, and leadership positions held within student organizations. However, there is yet to be a single proven, best-practice method of leadership education for students to gain knowledge of leadership competencies, personal skills and traits, and continual leadership development (Blackwell, Cummins, Townsend & Cummings, 2007).

Although leadership education can be deliberate, the majority of students are informally exposed to leadership competencies through courses where leadership is not the focus.

Therefore, the curriculum in students' general and concentration-specific courses reinforces key leadership competencies while students may not be aware of the impact it will have until later in their careers (Giroux & Penna, 1979). Even after college graduation, leadership experiences will not fade, as students will continually be given opportunities to practice leadership (Astin & Astin, 2000).

With the current generation of college students, leadership is a key term used more heavily than it has been in years past. "The best way to describe the current status of leadership studies is as an 'emerging discipline'" (Riggio, 2013, p. 10). Leadership education and curriculum is being sought after by students and faculty of universities across the nation. Various teaching strategies are implemented to teach leadership curriculum. Strategies such as hosting industry professionals as classroom guest speakers, hands on experience for students to shadow professionals in their daily jobs and more opportunities for students to engage in experiences outside of the classroom (Fritz & Brown, 1998). The study of leadership has received more recognition in education in recent years, and while it is not always a specific course taken, students are engaging in informal leadership education in a variety of classes in many disciplines such as business, education, agriculture, human environmental sciences, military studies, arts and sciences. Informal education is not intentional education rather it is taught through day-to-day life experiences, such as personal experiences with leadership roles (Etling, 1993).

Theoretical Framework

Trait Theory

Early leadership studies focused on leaders with a specific set of defined traits. Throughout the 20th century, studies have been conducted to evaluate the formula of great

leaders (Northouse, 2016). These so called *Great Man Theories* advocated leaders are individuals born with specific traits that yield themselves towards being a natural born leader (Stogdill, 1948). A trait is defined as an innate characteristic an individual is born with (Northouse, 2013). Therefore in theory, traits are inherited or ingrained in an individual's DNA. Traits are not learned and are characteristics an individual might or might not possess. Many studies have been conducted to determine a defined list of traits inherent in effective leaders. While there is not a defined single formula for leadership, researchers have discovered five traits present in most effective leaders. These traits could include, but are not limited to, intelligence, charisma (self-confidence), determination, integrity, and sociability (Northouse, 2013; Stogdill, 1948, Mann, 1959; Stogdill, 1974; Lord, DeVader, & Alliger, 1986; Kirkpatrick & Locke, 1991; Zaccaro, Kemp, & Bader, 2004).

An individual's traits formulate an individual's distinctive character or personality. Murphy and Davies (2006) conducted a breakoff study of the Trait Approach by utilizing the Five Factor Model created by Vinchur, Shippmann, Switzer, and Roth in 1998. This purpose of the study was to determine traits needed for success in the profession of sales. The Five Factor Model is comprised of "five broad factors (dimensions) of personality traits" (Srivastava, 2014). The five dimensions are extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Each of these five dimensions is further detailed with specific traits that collectively formulate the overall dimension. For example, the term extraversion refers to traits such as sociable, energetic, openness, and imaginative. The Five Factor Model is measured through a 44-item Likert-scale assessment (John & Srivastava, 1999). This study concluded an individual who is deemed a successful sales person would be "capable and driven towards established goals, but is capable of handling stressors, such as frequent sales 'no's', and gets

along well with others” (p. 18). Furthermore, the study advocated for future research to be conducted to find single factor measurements to determine links between job performance and personality (Murphy & Davies, 2006). “The trait approach suggests that organizations will work better if the people in managerial positions have designated leadership profiles” (Northouse, 2016, p. 29).

Skill Approach

Differing from the trait theory, the skills approach “provides a structure for understanding the nature of effective leadership” (Northouse, 2016, p. 56). An individual’s skills are defined as characteristics that have been acquired overtime from education and environmental influences (Northouse, 2013). Therefore, skills are learned through situational experiences and educational opportunities. Katz (1955) conducted research to determine the different types of skills possessed by individuals in leadership positions. The end result of the research was the development of the Three Skills Approach Model. This model contends “effective leadership depends on three basic personal skills: technical, human, and conceptual” (Northouse, 2013, p. 71). The term technical skills refer to an individual’s ability to use specific methods and techniques to complete a task. The ability of an individual to relate well to others and react to social cues are referred to as human skills. Finally, conceptual skills are needed at the highest level of leadership as they are associated with creating a vision, developing a strategic plan, and setting obtainable goals (Nahavandi, 2015). Furthermore, the skills approach accounts for environmental influences. Therefore in the skills approach, the effectiveness of the leader depends not only on his or her skill set but also on situation the leader is placed in (Nahavandi, 2015).

Purpose and Objectives

Studies demonstrate the importance of leadership being explored early in education rather than waiting for those skills and traits to develop over time with one's career (Nahavandi, 2006). "The development of leadership skills is a process, not an event" (Fritz, Williams & Barbuto, 2003, p. 4). This study is designed to evaluate students enrolled in the Fall 2014 AGEC 3323: Agricultural Production Marketing and Sales course offered at [State] University. This study analyzes students' self-perceived leadership competencies to determine if the course content impacted students' leadership competencies over the course of the semester. The research objectives that guided this study were as follows:

1. Determine demographics of agricultural sales students;
2. Determine leadership competencies of agricultural sales students;
3. Determine students' previous leadership experiences; and
4. Develop components of students' definition of leadership.

Methodology

To conduct this study, evaluative research methods were used to compare the change and relationship between leadership and personality characteristics of students in an agribusiness sales course at [State] University. Data was collected through a pretest-posttest, quasi-experimental research design and also through a basic demographic survey. Experimental research is deemed a credible approach to understand the effect of the intervention, in this case, the curriculum taught between pretest dissemination and posttest dissemination (McMillan & Schumacher, 2010). The pretest-posttest technique was chosen for both the convenience of dissemination and validity of results. The pretest-posttest design is a widely used technique and has been used in many educational research studies (Campbell & Stanley, 1966). There are some

limitations with this design, as students may over-compensate for the knowledge they have or the personality they best associate with before having a solid foundation of content and being able to appropriately evaluate themselves (Klatt & Taylor-Powell, 2005). Other limitations include the environment of the participant both personally and physically at the time of survey dissemination (Campbell & Stanley, 1996). Because there are no comparison groups or control groups, there is no evidence outside factors that fall between the pretest and posttest disseminations could be the cause of the change, if any, during the time of intervention (McMillan & Schumaker, 2010).

The data collection instrumentation utilized for this study were two assessments from *Leadership Theory and Practice* (Northouse, 2013), the Psychodynamic Approach assessment and the Task vs. Relationship assessment, the Clifton's StrengthsFinder assessment, and a demographic questionnaire. The Psychodynamic Approach survey from Northouse was used to evaluate introversion and extraversion of the participants. This approach was founded in the studies and findings from Berne's Transactional Analysis (1961), Freud's research of personality types (1938), and most significantly Jung's study of personality types, creating 16 possible combinations of four dimensions of personality (1923 and 1993) (Northouse, 2013, p. 319-348). The Task vs. Relationship assessment was validated through studies related to the Style Approach. These studies included Stogdill's research at The Ohio State University in 1948, the University of Michigan also in the 1940s, and most recently, Blake and Mouton's Managerial Approach in 1964. Clifton's (1999) StrengthsFinder was "developed through rational and empirical processes" and "has been repeatedly subjected to psychometric examination" (Asplund, Lopez, Hodges & Hartner, 2009, p. 2). A panel of experts reviewed and evaluated the demographic survey to ensure validity and reliability.

The population ($N=116$) of this study consisted of students enrolled in the Fall 2014 undergraduate [State] University Agribusiness Sales course, AGEC 3323: Agricultural Production Marketing and Sales. Of the total population, 97 students fully completed the pretest and posttest, four-part assessment packets ($n=97$), making the response rate 83.62%. The sample was selected from a convenience standpoint as all participants of the sample population were enrolled as students in the course (McCormick, Dooley, Linder, & Cummins, 2007).

Because of the nature of the pretest-posttest design, assessments were given during the first week of classes for the 2014 semester before any content of the course was delivered, and at the end of the same semester once all material from the course was taught. For the pretest, students were given a packet containing a consent form, the demographic survey, the Psychodynamic Approach assessment, the Task vs. Relationship assessment, and finally a handout with the 34 Clifton's StrengthsFinder characteristics. Students were provided the definitions for self-assessment of strengths for the pre-test rather than taking the official assessment as research shows an when taking the assessment, and individuals' top strengths remain mostly consistent over time, and therefore the actual assessment was only given once during the study (Hodges & Harter, 2005). Students filled out the packets pertaining to the directions carefully provided on each page. At the end of the semester, students provided their results from the Clifton's StrengthsFinder assessment, which was taken on their own time through a provided link. Students then received a packet similar to the one provided at the beginning of the semester with the same consent form, demographic survey, Psychodynamic Approach assessment, and Task vs. Relationship assessment (Appendix A).

Questionnaires were scored by the researcher according to the scoring directions provided with each assessment. For the purpose of this study, descriptive statistics were analyzed

through standard deviations, frequencies and percentages to assess the relationship between pretest and posttest scores. Correlation statistics were also used to determine strengths of relationships between pre and post-test data collections. Qualitative data was analyzed through content analysis using constant-comparative methods.

Results

There were a total of 116 undergraduate students enrolled in the fall 2014 undergraduate [State] University Agribusiness Sales course, AGEC 3323: Agricultural Production Marketing and Sales. Of the total enrolled, 115 completed the pretest, yet only 108 of the pretests were usable upon evaluation. There was only one factor that eliminated the other seven pretests; the directions for the Clifton's StrengthsFinder Assessment were misunderstood by students. A total of 110 posttests were returned. Of those posttests, 97 were usable.

From the data collected, demographics were evaluated for the 97 completed packets. Results were also gathered to analyze student insight of the relationship between sales and leadership. Students were surveyed both pre and posttest to analyze their intention to enter the sales force upon graduation. Analyses were made by comparing the pretest and posttest scores of the Task vs. Relationship assessment and the Psychodynamic Approach assessment. Results were also compared between students' self-perceived Clifton's StrengthsFinder assessment and the posttest results.

Participants were almost evenly distributed among male ($n=49$) and female ($n=48$) students. Additionally, students were primarily of junior status and enrolled in the college of Agricultural Sciences and Natural Resources. There was shown to be a mixture of majors within the Agricultural Sciences and Natural Resources College, mostly falling between Agricultural

Business and Animal Science. Students come from a variety of hometowns, with the majority of them growing up on a farm in a rural area. All demographic results can be seen in Table 1.

Table 1
Frequency of Demographic Characteristics of Study Participants

Characteristic	<i>f</i>	%
Gender:		
Male	49	50.52
Female	48	49.48
Classification in School:		
Freshman	0	0.00
Sophomore	23	23.71
Junior	54	55.67
Senior	20	20.62
Graduate Student	0	0.00
Major:		
Agricultural Business	39	40.21
Agricultural Communication	9	9.28
Agricultural Economics	8	8.25
Agricultural Education	3	3.09
Agricultural Leadership	5	5.15
Animal Science	29	29.90
Plant and Soil Science	6	2.06
Accounting	1	1.03
Not Declared	1	1.03
College:		
Agricultural Sciences and Natural Resources	96	98.97
Arts and Sciences	0	0.00
Education	0	0.00
Engineering, Architecture, and Technology	0	0.00
Human Sciences	0	0.00
School of Business	1	1.03
Center for Veterinary Health Sciences	0	0.00
Graduate College	0	0.00
Honors College	0	0.00
Hometown Description:		
Downtown area in a city or town	4	4.12
Subdivision in a city or town	8	8.25
Urban or suburban area outside of city limits	10	10.31
Rural area; not on a farm	7	7.22
Rural area; on a farm	68	70.10

Several students began the semester undecided if they wanted to seek sales as a career option. As the semester went on, students were able to make a more sound decision on this career choice. Table 2 shows a shift in students' decision to seek or not seek a sales position upon graduation with a positive correlation, $r=.302$, $p<.05$, ($M=.000$, $SD=1.031$).

Table 2
Frequencies and Percentages of Students Planning to Seek a Sales Position Upon Graduation

	Pre-Test		Post-Test	
	<i>f</i>	%	<i>f</i>	%
Yes	35	36.08	39	40.21
No	17	17.53	29	29.90
Undecided	45	46.39	29	29.90

Table 3 shows the majority of students believe there is a connection between sales and leadership both on the pretest and posttest. However, there as a slight decrease in students believing there is an association between leadership and sales, which resulted in a negative correlation, $r=-.034$, $p=>.05$, ($M=-.031$, $SD=.268$).

Table 3
Percentages of Students Who Find a Connection Between Sales and Leadership

	Pre-Test		Post-Test	
	<i>f</i>	%	<i>f</i>	%
Yes	95	97.94	92	94.85
No	2	2.06	5	5.15

Table 4 shows a slight shift over the course of the academic semester in students' perception of being task or relationship oriented. After course completion, students shifted to be more highly task oriented and a slightly less relationship oriented. From the analysis, it can be

seen students more often associated themselves with being highly task, $r=.373$, $p<.05$, ($M=-.186$, $SD=.651$) and relationship oriented, $r=.190$, $p>.05$, ($M=.062$, $SD=.788$).

Table 4
Frequencies and Percentages of Students Who Perceive Themselves More Task or Relationship Oriented

Level of Orientation	Pre-Test Task Oriented %		Post-Test Task Oriented %		Pre-Test Relationship Oriented %		Post-Test Relationship Oriented %	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
	Low	0	0.00	0	0.00	0	0.00	1
Mod. Low	5	5.15	4	4.12	4	4.12	6	6.19
Mod. High	48	49.48	32	32.99	44	45.36	43	44.43
High	44	45.36	61	62.89	49	50.52	47	48.45

Table 5 shows a large shift in student perception of introversion and extraversion over the course of the academic semester. Students became less introverted; however, instead of siding completely with extraversion, students' shifted to ambivert, being a mixture of both introverted and extraverted, $r=.390$, $p<.05$, ($M=-.186$, $SD=.618$).

Table 5
Frequencies and Percentages of Students Who Perceive Themselves More Introverted or Extraverted

Characteristic	Pre-Test		Post-Test	
	<i>f</i>	%	<i>f</i>	%
Introvert	35	36.08	27	27.84
Extravert	61	62.89	59	60.82
Ambivert	1	1.03	11	11.34

Found in Table 6, the top 5 most related characteristics from the students' perceived Strengths Finder assessment from the pretest survey, in no particular order were; Achiever (48.45%, $n=47$), Competition (36.08%, $n=35$), Responsibility (32.99%, ($n=32$), Communication (28.87%, $n=28$), and Belief (26.65%, $n=21$).

Table 6

Frequencies of Students Self-Perceived Clifton's StrengthsFinder Assessment

Characteristic	Ranked 1	Ranked 2	Ranked 3	Ranked 4	Ranked 5	f
Achiever	24	6	5	5	7	47
Belief	5	3	6	3	4	21
Communication	4	7	8	6	3	28
Competition	8	9	7	6	3	35
Responsibility	8	3	12	5	4	32

According to Table 7, the top 5 most related characteristics from the Strengths Finder assessment from the posttest survey, in no particular order were; Belief (47.42%, n=46), Responsibility (30.93%, n=30), Significance (30.93%, n=30), Relator (29.90%, n=29), and Self-Assurance (25.77%, n=25).

Table 7

Frequencies of Students Post-Test Clifton's StrengthsFinder Assessment

Characteristic	Ranked 1	Ranked 2	Ranked 3	Ranked 4	Ranked 5	f
Belief	18	6	10	6	7	46
Relator	7	6	6	4	6	29
Responsibility	5	5	8	8	4	30
Self-Assurance	5	5	4	7	4	25
Significance	8	7	5	5	5	30

According to Table 8, students' previous leadership experiences are widely varied. Students' answered with leadership positions they held from their youth to their college years. The majority of students' were participants in and FFA (81.44%, n=79) or 4-H (32.99%, n=32). Many students' were members of sports teams in high school (47.42%, n=46), where the majority were a captain or co-captain of their team (35.05%, n=34). Of the 97 students, only seven (7.22%) listed one leadership activity. The remaining 90 students (92.78%) stated multiple leadership experiences.

Table 8
Frequency of Leadership Experiences of Study Participants

Leadership Experience	<i>f</i>	<i>%</i>
FFA Member	79	81.44
State FFA Officer	5	5.15
Chapter FFA Officer	51	52.58
Sports Team Member	46	47.42
Team Captain or Co-Captain	34	35.05
4-H Member	32	32.99
State or District 4-H Officer	1	1.03
County or Club 4-H Leader	17	17.53
Student Council Members	20	20.62
Church Youth Group Members	16	16.49
College of Agriculture Science and Natural Resources (CASNR) Ambassadors	13	13.40
Aggie Society Members	12	12.37
Livestock Judging Team Members	8	8.25
Sorority or Fraternity Members	8	8.25
Class Officers or Representatives	7	7.22
Farm Credit/Farm Bureau Board Member	7	7.22
Fellowship of Christian Athletes Member	5	5.15
Honor Society Member	5	5.15
School Band Member	5	5.15
Work Team Leader	5	5.15
Agriculture Future of America Member	4	4.12
Boy/Girl Scouts	3	3.09
Camp Counselor	3	3.09
Family Career and Community Leaders of America Member	3	3.09
Homecoming Committee Member	3	3.09
Livestock Showing	3	3.09
Block and Bridle Member	2	2.06
Cattlemen's/Cattlegirl's Member	2	2.06
Quiz/Scholar Bowl Team Member	2	2.06
Class Valedictorian	1	1.03
Hunt or Hunger Officer	1	1.03
Junior Fair Board Member	1	1.03
Marine Corps	1	1.03
Oklahoma High School Rodeo Association Member	1	1.03

Table 9 gives representation of students' personal belief of their leadership. Most students identified themselves as leaders, while others thought their leadership was more present depending on the situation as they stated in their reasoning.

Table 9
Students' Perception of Self-Leadership

Do you Consider Yourself a Leader?	<i>f</i>	%
Yes	83	85.57
No	5	5.15
Sometimes	5	5.15
No Response	4	4.12

Students' were asked to state their personal definition of leadership. Many answered with the thought of how they think a leader should act, or characteristics a leader should possess. From the answers, eight common themes were categorized by the researcher using thick, rich description (Denzin, 1989) and verified by an expert panel. These themes included;

- Leaders take charge
- Leaders lead by example
- Leaders are influential
- Leaders strive to work for a common goal
- Leaders have good morals and ethics
- Leaders are motivators and inspirational
- Leaders organize and unify groups of people
- Leaders know when to listen

The first theme found encompasses that a leader is an individual who takes charge of a situation, who steps up to the task. This is supported with the following student definitions:

- Participant 209 – “Someone who takes charge of any and all situations.”
- Participant 213 – “Someone who takes charge...”

- Participant 304 – “Leadership is being able to step up to do what needs to be done.”
- Participant 506 – “Leadership is stepping up to do something most people wouldn’t.”

The second theme found was that a leader is a person who leads by example. This is supported by the following student definitions of leadership:

- Participant 103 – “Leadership is setting the example for others through doing.”
- Participant 404 – “Ability to act, teach, unite, and lead others by example.”
- Participant 606 – “... do the right thing and set the best example for others.”
- Participant 913 – “Guiding others and providing a positive example.”

Theme three states that leaders are influential. This theme is supported by the following examples:

- Participant 206 – “A good leader can win friends and influence enemies.”
- Participant 312 – “The potential to influence others.”
- Participant 508 – “The ability to influence others.”
- Participant 501 – “In my opinion, leadership is best defined as your ability to influence others.”

A leader is someone who wants to reach a common goal is the fourth theme found in students’ answers. This theme can be found in the following definitions:

- Participant 313 – “Leadership is serving others and helping a set of people achieve a common goal.”
- Participant 405 – “Owns ability to lead others to a common goal.”
- Participant 505 – “Being able to help others reach and set a common goal.”

- Participant 806 – “It means to lead other people to becoming better individuals or leading them to a common goal.”

The fifth theme revolves around morals and ethics. Within this theme lies the components of integrity, positivity, and dependability. This theme can be found in the following examples:

- Participant 113 – “A person with great morals, value, and integrity that people look at as a role model.”
- Participant 507 – “Leadership is showing good character having good ethics...”
- Participant 613 – “Honest, dependable person to lead a cause.”
- Participant 414 – “Having a positive influence on others.”

Theme six is that a leader is a motivator or inspirer, this can be found in the following student definitions:

- Participant 105 – “Leadership is being able to keep yourself motivated to achieve, while, helping others reach their full potential.”
- Participant 406 – The one who sets himself or herself apart in a good way as a means to help and inspire others.
- Participant 704 – “Motivates others to do what is right.”
- Participant 911 – “Showing to motivating other to help them be successful by leading by example.”

The seventh theme found that leaders are organizers as they can unify a group, this can be seen in the following examples:

- Participant 314 – “The ability to guide groups through examples of actions and speech.”
- Participant 513 – “Running a large group into doing the same activity smoothly.”

- Participant 710 – “A person who can organize a group of people to complete a goal.”
- Participant 910 – “When someone is able to guide/lead other people to successfully achieve the group’s goal.”

The eighth, and final theme is, leadership is knowing when to listen and when to step back and follow. This is a common theme found in the following definitions:

- Participant 407 – “Knowing when to lead and when to follow, you should be able to help people, but also know others have good ideas as well.”
- Participant 811 – “Leadership is being able to lead a group, but at the same time to listen to others to achieve the goal together.”
- Participant 812 – “Leadership to me means someone that takes control, but also listens to others.”
- Participant 905 – “Leadership is the ability to step in and help the situation, but also knowing when to listen and follow.”

Conclusions

For the purpose of this study, instruments utilized included two assessments from *Leadership Theory and Practice* (Northouse, 2013), the Psychodynamic Approach assessment and the Task vs. Relationship assessment, and the Clifton’s StrengthsFinder assessment, and student demographics. These assessments were chosen based on convince to be disseminated to the population, but also because of their nature. The Psychodynamic Approach was used to evaluate introversion and extraversion. This approach has been used to conduct research pertaining to the workforce through studies by Linnehan and Blau (1998) working with incoming, young professionals; and a second study by Vincent and Ross (2001) to evaluate how

employees are energized throughout their daily tasks. The Task vs. Relationship Orientation is used to better understand employees and their ability to work with one another, as found in a 2002 study through the University of Iowa (Bono, Boles, Judge, & Lauver), outlining the factors that contribute to being task or relationship oriented and how those factors effect ones personality. Finally, research shows the importance of knowing one's self, through understanding your strengths (Jackson, 2011). Understanding the skills and traits student's offer, gives an educator and a professional the opportunity to fit the individual into an area they will be most successful in.

To approach objective one, determine the demographics of agricultural sales students, the object was met through the demographic questionnaire. The class was well represented by both males at 50.52% ($n=49$) and females with 49.48% ($n=48$) who were primarily juniors, 55.67% ($n=54$) enrolled in the College of Agricultural Sciences and Natural Resources ($n=96$) and grew up on a rural farm ($n=68$). When looking specifically at student's future career plans, their desire to seek a sales career upon graduation was interesting to note. When breaking down the results of students' plan to seek a sales position upon graduation, 19 students responded yes to both the pre and posttest, 12 students responded no on both assessment and 24 were undecided at the beginning and the end of the semester. Throughout the semester, as curriculum was taught and experiences were had in the sales field, of the undecided students from the pretest, eight changed their answers to yes for the posttest and 13 shifted from undecided to no. This shows course curriculum was able to help students determine if they wanted to or did not want to pursue sales as a potential career choice. Also, over the semester there was a slight decrease, resulting in a negative correlation ($r=-.034$) of students believing there was a relationship between sales and leadership.

Objective two, determine leadership competencies of agricultural sales students, was addressed with the three leadership assessments provided to students. To the surprise of the researcher, students were less relationship oriented than anticipated as more students identified themselves with being high task oriented by the end of the semester with 62.89% ($n=61$). As students' identification of being task or relationship oriented altered, this is seen as a skill rather than a trait because it is influenced by outside factors such as education and environment (Northouse, 2013). A contributing factor to this finding and understanding that environment plays its part in skill adaptation was, during the semester when the pretest and posttests were disseminated, the physical and emotional state of students could be vastly altered. This is because towards the end of the semester a student's work load seems to increase and the stress of final examinations can cause an altered score on personality assessments than when in a more relaxed environment. Students were still primarily considered extraverted through the pretest, 62.89% ($n=61$) and the posttest, 60.82% ($n=59$). However, statistics showed a shift in students being more ambivert at the conclusion of the semester once curriculum was taught. Ambivert is to be both introverted and extroverted, and the stronger characteristic is prevalent dependent on the situation. The data of introversion and extraversion shows this would fall under the category of a leadership skill also as it is something that was influenced over the course of the semester through education and environment (Northouse, 2013). The education factors would include course curriculum from the sales class, including but not limited to; daily lectures, course exams, group projects and mentorships with sales professionals. Environmental factors may be the stress of end of semester exams and projects, upcoming graduation or internships or other various social influences.

An individual's traits formulate an individual's distinctive character or personality. Sales individuals need to be able to handle multiple aspects at once, they need to be goal-oriented, but able to adapt when plans change and still hold reputable relationships (Murphy & Davies, 2006). Assessment results demonstrate students are concerned with developing close, interpersonal relationships as they are primarily extraverted and highly relationship oriented (Northouse, 2013). Also, students' strengths are identified with being able to build relationships through being relatable and finding the significance of the relationship. Also, they will be able to handle the frequent "no's" because they believe in their work.

At the beginning of the semester, when students self-evaluated and picked the top five traits they associated themselves with according to the definition, the most commonly noted trait was Achiever with 48.85%, while at the end of the semester after students completed the assessment online, Achiever was not even noted in the top five characteristics of the class. However, responsibility and belief were found on both the pretest and posttest data counts.

The third objective, determine students' previous leadership experiences can be found in Table 9. Experiences were coded for themes through content analysis and while the data was gathered through qualitative measures, the information was analyzed as quantitative to be grouped into categories (Merriam, 2009). While the question was developed to be open-ended and was not designed to lead students to answer in any particular way, students primarily listed previous leadership experiences from their high school careers. This was deemed a notable finding, and future research could also be done to develop a study focusing on how high school leadership experiences impact collegiate leadership experiences and personality of students. Students were heavily involved in FFA and 4-H in high school, and through these organizations they held many officer positions from the local to state levels. The second highest ranking of

student involvement was through high school sports where 47.42% of the population was involved in some sort of organized sports team, and the vast majority of those students, 35.05%, were a leader or captain of their sports team. The primary leadership experience seen in participants is that of agriculture program involvement from primary education on to secondary education such as FFA or 4-H. Students' were involved in clubs such as Block and Bridle, College of Agriculture Science and Natural Resources Ambassador Program, and livestock judging teams.

The fourth and final objective, develop components of students' definition of leadership, is explained through eight common themes found among participant answers. Students' thoughts on leadership, or how leaders should conduct themselves are found in the following themes:

- Leaders take charge
- Leaders lead by example
- Leaders are influential
- Leaders strive to work for a common goal
- Leaders have good morals and ethics
- Leaders are motivators and inspirational
- Leaders organize and unify groups of people
- Leaders know when to listen

The students' perceptions of leadership and how a leader should act, closely follow the most widely used definition of leadership in education. In the discipline of leadership education, most practitioners refer to Northouse's definition of leadership, which defines the phenomenon as "a process whereby an individual influences a group of individuals to achieve a common goal" (p. 5). This definition outlines four specific components of leadership: leadership is a

process, involves influencing others, leadership happens among a group of people, and involves the ability to set and achieve group goals (Northouse, 2013). The concept of leadership being a process is a key aspect of the definition. Defining leadership as a process means leadership is a phenomenon that occurs between a leader and the followers. Furthermore, the term process implies the relationship is continually moving and therefore, leadership is not stagnant, it is an active process (Bass, 1990). Defining leadership as a process allows multiple individual the opportunity to become a leader based on education, experience, or situation (Daft, 2010). Therefore, leadership is available to everyone and not just to those born with specific traits or characteristics (Northouse, 2013).

Recommendations

This study was successful at finding the basic demographic, personality and leadership information of the students enrolled in the spring 2014 Agribusiness Sales course at [State] University. Future research could be conducted to find leadership characteristics of sales professionals in the agricultural sales industry. Having information about both students and professionals could help connect students and sales professionals. Research shows an increasing need for prepared graduates to enter the workforce with specific competencies for their desired career-fields (Dunne & Rawlins, 2000).

Previous research shows the lack of connection between employer expectation of recent graduates and the graduates' ability to perform specific tasks (Graham, 2001). Research suggests the development of awareness of industry desired skills to be placed into higher education curriculum (Hills, Robertson, Walker, Adey & Nixon, 2003; Dunne & Rawlins, 2000; Everwijn, Bomers & Knubben, 1993). Research could also be done to bridge the gap of knowledge between what students are learning in the classroom and what professionals are using in the

industry. “One of the roles for the higher education sector is to supply suitably skilled graduates to the workplace” (Hills, Robertson, Walker, Adey & Nixon, 2003, p. 211). By evaluating sales professionals and determining what content should be taught in a sales course based on knowledge they use on a day to day basis, students would be able to gain a more practical knowledge base to make them more successful in future sales positions.

Future researchers may also consider the option to assess students in a different manner such as the retrospective post-then design to help reduce the limitations found with the pretest-posttest quasi-experimental design. The nature of the post- then design is to collect all the data at one time both pre and posttest data, through this design, the probability of high response rate and complete data sets are increased (Raidl et. al., 2004). The post-then design assists the researcher in accurately capturing participants’ true knowledge of the subject matter as it is difficult for students to understand what they know prior to be introduced to course work. Therefore, students may over-compensate for the knowledge they believe they have before gaining a solid foundation of content. The post-then method allows the participant to more accurately evaluate themselves. The retrospective design “more accurately assess their [participants] baseline level of understand after the program [course] has provided them an opportunity to better illustrate the degree of change as a result of the program [course] and provided me [the researcher] with more meaningful data” (Davis, 2003).

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Appendices

Appendix A

Pre and Post-Test Questionnaire

Consent Form for Agricultural Sales Leadership Competencies Study

You have been asked to participate in a research project studying leadership trait and characteristic growth of students enrolled in the Fall 2014 Argibusiness Sales course at Oklahoma State University. The overall purpose of this research project is to determine common traits and characteristics exhibited by students in this course and to evaluate their growth within those traits and characteristics throughout the course. You were selected to be a possible participant because you are enrolled in the Agribusiness Sales course for the current semester.

If you agree to participate in this study, you will complete three leadership assessments on two separate occasions this semester, including Introverts vs. Extraverts, Task vs. Relationship Orientation, Strengths Finder. The three assessments will take approximately 30 minutes to complete.

Your participation in these assessments is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Oklahoma State University being affected.

This study is confidential to the extent allowed by law and University policy, and all data will be reported as group data. No identifiers linking you to this study will be included in any sort of report that might be published. Research records will be stored securely and only Committee Chair's Name (Institution) or Researcher's Name will have access to the records.

If you have questions regarding this study, you may contact Committee Chair's Name at (xxx) xxx-xxxx or emailaddress@uark.edu.

This research study has been reviewed by the Institutional Review Board at the University of Arkansas. For research-related problems or questions regarding your rights as a research participant, you can contact Ro Windwalker, the University's Compliance Coordinator, at (479) 575-2208 or email irb@uark.edu.

Please indicate below your consent to participate in this study by checking a box below.

Yes

No

Task vs. Relationship

Before beginning this questionnaire please write your seat number in the participant ID spot that the top right hand corner of the paper.

For each item below, indicate on the scale the extent to which you engage in the described behavior. Move through the items quickly. Do not try to categorize yourself in one area or another. Then complete the scoring guide at the bottom of the statements.

Statements	Never	Rarely	Sometimes	Often	Always
1. Make a "to do" list of the things that need to be done.	1	2	3	4	5
2. Try to make the work fun for others.	1	2	3	4	5
3. Urge others to concentrate on the work at hand.	1	2	3	4	5
4. Show concern for the personal well-being of others.	1	2	3	4	5
5. Set timelines for when the job needs to be done.	1	2	3	4	5
6. Help group members get along.	1	2	3	4	5
7. Keep a checklist of what has to be accomplished.	1	2	3	4	5
8. Listen to the special needs of each group member.	1	2	3	4	5
9. Stress to others the rules and requirements for the project.	1	2	3	4	5
10. Spend time exploring other people's ideas for the project.	1	2	3	4	5

SOURCE:

Northouse, P. G. (2014). *Introduction to leadership: Concepts and practice*. Retrieved from www.sagepub.com/northouseintro2e

Introvert or Extrovert

Before beginning this questionnaire please write your seat number in the participant ID spot that the top right hand corner of the paper.

For each of the following eight sentences, rate the degree to which you believe it describes you on a scale of 1 to 6, as described in the key. The sentences are paired in such a way that your ratings for each pair should add up to 7 (e.g., if you rate one sentence with a 3, then the other sentence in the pair should be rated a 4).

KEY: 6 = always true 5 = often true 4 = usually true 3 = sometimes true 2 = rarely true 1 = never true

- | | |
|--|-------------|
| 1. I am sociable, outgoing, gregarious, a people person, and real talkative. | 1 2 3 4 5 6 |
| 2. I am reflective, deep, internally focused, an idea person, and quiet. (Total ratings for items 1 + 2 = 7) | 1 2 3 4 5 6 |
| 3. I am practical, realistic, and factual, and I like details. | 1 2 3 4 5 6 |
| 4. I am conceptual, theoretical, future oriented, and a generalist. (Total ratings for items 3 + 4 = 7) | 1 2 3 4 5 6 |
| 5. I am firm, just, clear, and detached in decision making. | 1 2 3 4 5 6 |
| 6. I am humane, harmonious, and subjective, and I like multiple inputs. (Total ratings for items 5 + 6 = 7) | 1 2 3 4 5 6 |
| 7. I am structured, scheduled, planned, and in control. | 1 2 3 4 5 6 |
| 8. I am adaptable, flexible, spontaneous, and open. (Total ratings for items 7 + 8 = 7) | 1 2 3 4 5 6 |

SOURCE

Adapted from *Quick Guide to the 16 Personality Types in Organizations*, by L.V. Berens, S. A. Cooper, L. K. Ernst, C. R. Martin, S. Myers, D. Nardi, R. R. Pearman, S. Segal, and M. A. Smith, 2001, Huntington Beach, CA: Telos.

Northouse, P. G. (2014). *Introduction to leadership: Concepts and practice*. Retrieved from www.sagepub.com/northouseintro2e

Strengths Quest Descriptions

Before beginning this questionnaire please write your seat number in the participant ID spot that the top right hand corner of the paper.

Please read over the following characteristics and descriptions. Rank the top five characteristics that most describe you, starting with 1 for the characteristic most like you going to 5.

- **Achiever:** People especially talented in the Achiever theme have a great deal of stamina and work hard. They take great satisfaction from being busy and productive.
- **Activator:** People especially talented in the Activator theme can make things happen by turning thoughts into action. Once a decision is made, they want to act quickly.
- **Adaptability:** People especially talented in the Adaptability theme prefer to “go with the flow.” They tend to be “now” people who take things as they come and discover the future one day at a time.
- **Analytical:** People especially talented in the Analytical theme search for reasons and causes. They have the ability to think about all the factors that might affect a situation.
- **Arranger:** People especially talented in the Arranger theme can organize, but they also have a flexibility that complements this ability. They like to figure out how all of the pieces and resources can be arranged for maximum productivity.
- **Belief:** People especially talented in the Belief theme have certain core values that are unchanging. Out of these values emerges a defined purpose for their life.
- **Command:** People especially talented in the Command theme have presence. They can take control of a situation and make decisions.
- **Communication:** People especially talented in the Communication theme generally find it easy to put their thoughts into words. They are good conversationalists and presenters.
- **Competition:** People especially talented in the Competition theme measure their progress against the performance of others. They strive to win first place and revel in contests.
- **Connectedness:** People especially talented in the Connectedness theme have faith in the links between all things. They believe there are few coincidences and that almost every event has a reason.
- **Consistency:** People especially talented in the Consistency theme are keenly aware of the need to treat people the same. They try to treat everyone in the world with consistency by setting up clear expectations and adhering to them.
- **Context:** People especially talented in the Context theme enjoy thinking about the past. They understand the present by researching its history.
- **Deliberative:** People especially talented in the Deliberative theme are best described by the serious care they take in making decisions or choices. They anticipate the obstacles.
- **Developer:** People especially talented in the Developer theme recognize and cultivate the potential in others. They spot the signs of each small improvement and derive satisfaction from these improvements.
- **Discipline:** People especially talented in the Discipline theme enjoy routine and structure. Their world is best described by the order they create.
- **Empathy:** People especially talented in the Empathy theme can sense the feelings of other people by imagining themselves in others’ lives or others’ situations.

Please Continue to Page 2

- **Focus:** People especially talented in the Focus theme can take a direction, follow through, and make the corrections necessary to stay on track. They prioritize, then act.
- **Futuristic:** People especially talented in the Futuristic theme are inspired by the future and what could be. They inspire others with their visions of the future.
- **Harmony:** People especially talented in the Harmony theme look for consensus. They don't enjoy conflict; rather, they seek areas of agreement.
- **Ideation:** People especially talented in the Ideation theme are fascinated by ideas. They are able to find connections between seemingly disparate phenomena.
- **Includer:** People especially talented in the Includer theme are accepting of others. They show awareness of those who feel left out, and make an effort to include them.
- **Individualization:** People especially talented in the Individualization theme are intrigued with the unique qualities of each person. They have a gift for figuring out how people who are different can work together productively.
- **Input:** People especially talented in the Input theme have a need to collect and archive. They may collect information, ideas, history, or even relationships.
- **Intellection:** People especially talented in the Intellection theme are characterized by their intellectual activity. They are introspective and appreciate intellectual discussions.
- **Learner:** People especially talented in the Learner theme have a great desire to learn and want to continuously improve. In particular, the process of learning, rather than the outcome, excites them.
- **Maximizer:** People especially talented in the Maximizer theme focus on strengths as a way to stimulate personal and group excellence. They seek to transform something strong into something superb.
- **Positivity:** People especially talented in the Positivity theme have an enthusiasm that is contagious. They are upbeat and can get others excited about what they are going to do.
- **Relator:** People especially talented in the Relator theme enjoy close relationships with others. They find deep satisfaction in working hard with friends to achieve a goal.
- **Responsibility:** People especially talented in the Responsibility theme take psychological ownership of what they say they will do. They are committed to stable values such as honesty and loyalty.
- **Restorative:** People especially talented in the Restorative theme are adept at dealing with problems. They are good at figuring out what is wrong and resolving it.
- **Self-Assurance:** People especially talented in the Self-Assurance theme feel confident in their ability to manage their own lives. They possess an inner compass that gives them confidence that their decisions are right.
- **Significance:** People especially talented in the Significance theme want to make a big impact. They are independent and sort projects based on the level of influence it will have on their organization and others around them.
- **Strategic:** People especially talented in the Strategic theme create alternative ways to proceed. Faced with any given scenario, they can quickly spot the relevant patterns and issues.
- **Woo:** People especially talented in the Woo theme love the challenge of meeting new people and winning them over. They derive satisfaction from breaking the ice and making a connection with another person.

10. Please list your previous leadership experiences (examples may include; FFA, 4-H, captain of sports team, officer in collegiate club, church roles, Boy/Girl Scouts, etc.)

CHAPTER III. DESIRED LEADERSHIP COMPETENCIES AMONG AGRICULTURAL SALES PROFESSIONALS: A DELPHI STUDY

Abstract

As leadership continues to be a growing trend in the business industry, it is important to educate future professionals to be leaders in the workplace by utilizing the skills and traits they possess. This study was designed to survey sales professionals (n=36) involved with an agricultural sales course at [State] University to better understand the desired competencies an individual should possess to be successful within the agricultural sales industry. Participants were also surveyed to provide curriculum topics for agricultural sales courses to help bridge the gap between education and industry. Demographic information of participants was gathered and analyzed to guide the research. The majority, (94.44%) of the study participants were males with 58.33% ranging between the ages of 26 and 50. This study was conducted using a modified Delphi method to develop rankings of competency and curriculum themes suggested by participants. The findings of the study concluded in a successful consensus of each survey question with over 90% agreeability for each group of the rankings. Integrity was notably ranked first for all questions, following previous research.

Introduction

Currently a buzzword in industry, leadership has become a key component of business training and development and therefore, employers are seeking new college graduates who not only possess technical skills but also possess leadership competencies (Morgan, King, Rudd, & Kaufman, 2013; Crawford, Lang, Fink, Dalton, & Fielitz, 2011). Leadership is no longer only found in top-tier positions, but also at entry-level positions (Minkes, Small & Chatterjee, 1999). In the *Leadership Challenge* study (Kouzes & Posner, 2011), characteristics of admired leaders

have been established over the past thirty years by asking top global industry executives what leadership characteristics they desire in a leader. The study is repeated every four years to continue research and find what characteristics are sought after as industry changes in our rapidly changing world. The study defines 20 different “Characteristics of Admired Leaders”, and many of the defined competencies have remained consistent including honesty, forward-looking, competent, inspiring, and intelligent.

Reports state students desire their higher education experience to prepare them for future careers, even as early as their first year of college (Farrell, 2007). Consequently, research shows, “for more than a decade, employers have expressed a concern for the lack of graduates sufficiently trained to meet the challenges of a high-performance workplace” (Graham, 2001, p.89). In today’s flooded job market, it is important for graduates to possess specific competencies to fit their potential careers (DuPre & Williams, 2011). By reinforcing key leadership competencies, educators can further prepare students to be top candidates in the job market (Crawford et, al., 2011). “A new generation of leaders is needed not only to build local partnerships in today’s communities, but to assume all positions of leadership” (Ricketts & Bruce, 2008, p. 24).

In agriculture there are many available employment opportunities in sales. Agricultural sales can include livestock, commodities, equipment, veterinary supplies, and chemicals. If one were to define leadership within the context of sales, the definition would be “activities performed by those in a sales organization to influence others to achieve common goals for the collective good of the sales organization and company” (Ingram, LaForge, Locander, MacKenzie, & Podsakoff, 2005, p. 137).

To succeed in the sales industry, a variety of skills and traits are needed. While early leadership personality studies conclude each individual possesses a unique set of characteristics that contribute to his or her success (Bowden, 1926), later studies have been able to identify clusters of key characteristics possessed by successful employees within a given industry. This is not a new concept as researchers have been citing the need for years. For example, a study conducted in Nebraska in 1989, found, “customer relation skills” and “communication skills” were ranked among the top desired traits for business sales professionals seeking employment (Spotanski & Foster, 1989). Other competencies included the ability to work with a diverse group of people, problem solving, conflict resolution, and the development of professional relationships (Ingram, LaForge, Locander, MacKenzie, & Podsakoff, 2005). Additionally, a study conducted by Ma, Yu, and Chenge (2013) cited personality as a key success indicator in the field of sales.

Theoretical Framework

Skill Approach

Katz first recognized the skill approach when he researched the various skills types people could possess which resulted in the Three Skills Approach Model (1955). The model explains the development of leadership cultivated from a triad of personal skills. The skills are conceptual, human and technical. Conceptual skills are described as being able to see the broad picture, human skills are how well the individual relates to others, and finally technical skills are specific methods the individual uses (Northouse, 2013). The skills approach is often enhanced through the environments the leader is placed in (Nahavandi, 2015). Skills are defined as characteristics developed and sharpened through educational and environmental influences (Northouse, 2013).

Trait Theory

Unlike skills, traits are not characteristics developed through specific environments. They are not learned through education. Traits are not gained or developed like skills, but instead are natural to each individual (Stogill, 1948). Northouse explains traits as being specific characteristics an individual is born with (2013). Traits could even be narrowly defined to include the natural, physical appearance of an individual as those are characteristics an individual has without influence of environment and education, those are characteristics they are born with, research has been done to study the physical traits found in various leaders (Bass, 1990a). Because the nature of traits being specific to an individual's personality, there is not a formula researchers have found to determine the a ranking order of traits . Early research shows *Great Man Theories* to prove individuals to be natural born leaders (Stogdill, 1948). Additional research of these theories have demonstrated a commonality in traits found in effective leaders including intelligence, charisma (self-confidence), determination, integrity, and sociability (Northouse, 2013; Stogdill, 1948, Mann, 1959; Stogdill, 1974; Lord, DeVader, & Alliger, 1986; Kirkpatrick & Locke, 1991; Zaccaro, Kemp, & Bader, 2004). These noted traits fall closely in line with the Five Factor Model dimensions of extraversion, agreeableness, conscientiousness, neuroticism, and openness (Srivastava, 2014).

Transformational Leadership

Transformational leadership is heavily studied in the business world (Bass & Riggio, 2006; Northouse, 2013; Ingram, LaForge, Locander, MacKenzie, & Podsakoff, 2005). The original concept of transformational leadership is explored in the book titled *Leadership*, where it is found that leadership is comprised of many different aspects rather than only being focused on the leader (Burns, 1978). Transformational leadership was deeper explored with Bass' (1985)

research. This research paved the way for work environments to completely change with the understanding of employee to employer relationships (Rafferty & Griffin, 2004). When breaking down transformational leadership, it is seen that morality, passion and purpose drive followers to be guided by a leader (Crawford & Strohkrich, 2004). Leaders are considered to be charismatic and inspiring. They are people who care about their followers (Bass, 1990b). Because of the nurturing and attention to detail transformational leaders provide, they “tend to have more committed and satisfied followers” (Bass & Riggio, 2006).

Purpose and Objectives

This study explores the potential need for educators to place special emphasis on the development of leadership competencies. By reinforcing key leadership competencies, educators can further prepare students to be top candidates in the job market (Crawford et, al., 2011). “A new generation of leaders is needed not only to build local partnerships in today’s communities, but to assume all positions of leadership” (Ricketts & Bruce, 2008, p. 24).

The purpose of this study is to utilize agricultural sales professionals involved with the Fall 2014 AGEC 3323: Agricultural Production Marketing and Sales course offered at [State] University to identify the desired leadership competencies needed for a successful sales professional. The objectives that guided this research were:

1. Determine demographics of agricultural sales professionals;
2. Develop a consensus of desired competencies to be deemed successful in the agricultural sales profession
3. Develop a consensus of competencies possessed by agricultural sales professionals; and
4. Determine curriculum topics that should be included in an Agribusiness sales course.

Methodology

To conduct this study, evaluative research methods were used to gather data and ensure a consensus result of the desired competencies new graduates should possess when entering the agricultural sales workforce. Participants were surveyed to develop themes that were then ranked in a second round. A consensus was determined by a majority vote for the ranked order of competencies found through the final round of survey results.

The Delphi technique was modified and used to gather data for this study and ensure the most inclusive results when determining a desired set of leadership competencies for potential agricultural sales employees. Data was collected through a three-round Delphi study and a basic demographic survey. The Delphi technique was utilized for both the convenience and validity of results. “The Delphi technique may be characterized as a method for structuring a group so that the process is effective in allowing a group of individuals as a whole, to deal with complex problems” (Linstone & Turnoff, 1975, p. 13). Through a multi-round series of data collection, this method proves to be a reliable effort to reach a consensus with established experts (Stufflebeam, McCormick, Binkerhoff, & Nelson, 1985; Ziglio, 1996).

Because of the nature of a Delphi study, instrumentation utilized for this study was a series of questions administered over three rounds, this study was considered to be a modified version as it only served three rounds of questions to participants. Questions were developed by the researcher and validated by a panel of experts.

The target audience of this study included the agricultural sales professionals ($N = 40$) used to evaluate students enrolled in an undergraduate agricultural sales course at [State] University. The sales professionals were provided a demographic questionnaire and initial series of questions at the Ready, Set, Sell night (Appendix A). This event serves as the capstone

activity for course as all students are to present a formal sales presentation and be critiqued by agricultural sales professionals. The sales professionals are a set group of individuals who have established successful careers in the agricultural sales industry. This population was chosen because of convenience as the sales professionals were all gathered in one location at the same time to ensure maximum participation in the initial round of the study (McCormick, Dooley, Linder, & Cummins, 2007).

After the initial contact on Ready, Set, Sell night, the researcher condensed the information to conduct rounds two and three of the Delphi study. Both rounds two (Appendix B) and three (Appendix C) were administered through a Qualtrics Survey and dispersed via e-mail which provided a survey link (Appendix D and E). To reduce maturation, the researcher followed the process outlined by Dillman (2008) and sent follow up email reminders to encourage full participation in the study (Appendix F and G). The dissemination of rounds two and three brought limitations as the researcher created one link to be dispersed to all participants rather than a specific link to the survey for each participant. Because of this, the researcher was then unable to keep record of respondents for round two and only disseminate round three to the participants of the second round.

Descriptive statistics were administered to analyze the demographic portion of this study. Data was coded and entered into an Excel file where frequencies, percentages and rankings were used to evaluate the demographic and round one Delphi study responses using the constant-comparative method of content analysis. Results from rounds two and three were evaluated through means, frequencies and percentages found through the Qualtrics system.

Results

The first round of the study, 40 agricultural sales professionals were surveyed, 36 surveys were deemed usable in the data set as others were disregarded for not finishing the survey ($n = 1$) or not providing a valid or legible e-mail address for dissemination of the following rounds ($n = 3$), thus giving the researcher a 90% response rate. Round one was disseminated in person, at Ready, Set, Sell night. Participants were given a packet consisting of a consent form, a demographic questionnaire and round one of the questions. Participants' answers were recorded by the researcher, evaluated and developed into themes. These themes were analyzed by an expert panel and revised. Themes were developed through content analysis as data was coded for commonalities of responses (Merriam, 2009).

Basic demographics for participants (Table 1) resulted the dominant gender of participants being male (94.44%) who had graduated with a Bachelor's Degree (66.49%). The age range of professionals was evenly dispersed between 21 and over 66 years of age. Half of the participants had been in their current sales position for five years or less while the other half had been in their position for six years or more.

Table 1
Frequency of Demographic Characteristics of Study Participants

Characteristic	<i>f</i>	%
Gender:		
Male	34	94.44
Female	2	5.56
Age Range:		
<20	0	0.00
21-25	3	8.33
26-30	6	16.67
31-35	5	13.89
36-40	2	5.56
41-45	4	11.11
46-50	4	11.11

Table 1 (continued)

Characteristic	<i>f</i>	%
51-55	3	8.33
56-60	2	5.56
61-65	3	8.33
66>	4	11.11
Number of Years in Current Position:		
0-2	9	25.00
3-5	9	25.00
6-9	7	19.44
10>	11	30.56
Highest Degree of Education		
GED	0	0.00
High School Diploma	2	5.56
Associate's Degree	1	2.78
Bachelor's Degree	25	69.44
Master's Degree	4	11.11
MBA	4	11.11
Doctoral Degree	0	0.00

Participants were given the definitions of introvert and extravert from: *Leadership Theory and Practice* (Northouse, 2013). An introvert is one who internally derives energy and is drained by too much social interaction (Northouse, 2013). On the opposite end of the spectrum, an extravert is an individual who has a preference for obtaining information, inspiration, and energy from outside the self and gathering energy from social atmospheres (Northouse, 2013). From the definition provided participants self-identified themselves with being introverted or extraverted. Results are found in Table 2.

Table 2

Frequencies and Percentages of Sales Professionals Who Perceive Themselves More Introverted or Extraverted

Characteristic	<i>f</i>	%
Introvert	8	22.22
Extravert	28	77.78

Similar to the results above, participants were given the definitions of task-oriented and relationship-oriented from: *Leadership Theory and Practice* (Northouse, 2013). An individual who is task-oriented is defined as being primarily concerned with reaching a goal (Northouse, 2013). Individuals who see themselves as relationship oriented are “more concerned with developing close interpersonal relationships” (Northouse, 2013, p. 124).

From the definition provided participants self-identified themselves with being task or relationship oriented. Results are found in Table 3 where the majority related to being relationship oriented, 61.11%. Two individuals, 5.56%, noted they felt you could not have one without the other.

Table 3
Frequencies and Percentages of Sales Professionals Who Perceive Themselves More Task or Relationship Oriented

Characteristic	<i>f</i>	%
Task-Oriented	12	33.33
Relationship-Oriented	22	61.11
Both	2	5.56

The Delphi questions in round one were open-ended and therefore responses varied greatly. Answers were evaluated by the researcher and grouped into themes. An expert panel verified the themes.

Question one from the survey asked, “What competencies (skills or traits) should an individual possess to be successful in the agricultural sales profession?” Of the 141 different skills and traits listed from the participants, eight overall competencies were developed to encompass the answers given. The eight themes included: Communication Skills (Verbal and Non-Verbal), Goal-Oriented and Results Driven, Identification of Customer Needs, Integrity,

Personal and Professional Management, Personality Traits, Product and Industry Knowledge and Relationship and Interpersonal Skills.

Question two of the round one survey asked, “What topics should be included in Agribusiness Sales curriculum to prepare students to enter the sales force?” With 100 answers given responses were divided into nine different categories. They were as follows: Adaptability and Ability to Cope with Rejection, Communication Skills (Verbal and Non-Verbal), Fundamental Education of Economics and Agriculture, Integrity, Marketing and Networking, Practical Application, Professionalism, Relationship and Interpersonal Skills and Self-Motivation and Goal Orientation

The third, and final, question on the first round of the survey was, “What leadership competencies (skills and traits) do you use in your job as a sales professional?” There were 110 responses to the question. Responses were grouped into eight themes: Communication Skills (Verbal and Non-Verbal), Continuous Learning and Adaptability, Integrity, Personal Organization Skills, Personality Traits, Product and Market Knowledge, Relationship Building and Self-Motivation.

Round two was disseminated through an e-mail link to a Qualtrics survey. The survey started with a consent form and then asked participants to rank in order of importance from first to last, the themes found in the round one answers. The survey was sent to the original 36 participants from round one, of those participants, 28 responded; however, only 24 surveys were usable as some participants did not finish all questions of the survey ($n = 4$), resulting in a 66.67% response rate. The questions were worded exactly as the questions in round one. Participants ordered their list from most agreed with to least agreed, and the overall list was compiled by finding the average ranking of each theme.

Table 4

Competencies an Individual should Possess to be Successful in the Agricultural Sales Profession

Competencies	<i>n</i>	<i>M</i>
Integrity	25	1.88
Communication Skills (Verbal and Non-Verbal)	25	3.60
Relationship and Interpersonal Skills	25	3.64
Identification of Customer Needs	25	4.52
Product and Industry Knowledge	25	4.96
Goal-Oriented and Results Driven	25	5.32
Personal and Professional Management	25	5.60
Personality Traits	25	6.48

Table 5

Topics that should be included in Agribusiness Sales Curriculum

Competencies	<i>n</i>	<i>M</i>
Integrity	25	3.00
Professionalism	25	4.16
Relationship and Interpersonal Skills	25	4.24
Communication Skills (Verbal and Non-Verbal)	25	4.40
Self-Motivation and Goal Orientation	25	4.64
Adaptability and Ability to Cope with Rejection	25	5.28
Marketing and Networking	25	6.12
Fundamental Education of Economics and Agriculture	25	6.44
Practical Application	25	6.72

Table 6

Competencies Used in the Daily Workings of Agricultural Sales Professionals

Competencies	<i>n</i>	<i>M</i>
Integrity	24	2.08
Self-Motivation	24	3.04
Relationship Building	24	3.38
Product and Market Knowledge	24	4.58
Communication Skills (Verbal and Non-Verbal)	24	4.67
Continuous Learning and Adaptability	24	5.42
Personality Traits	24	6.25
Personal Organization Skills	24	6.58

In the final round, round three, participants were asked to form a consensus of the ranked answers from round two. In round three of the survey participants were given the ranked list from round two and the option to select “yes – agree” or “no – disagree” for each of the mean

scored rankings. Round three was sent to the initial 36 participants via email and there were a total of 24 surveys completed, 21 surveys were usable, giving a 58.33% response rate.

Table 7
Agreeability of Ranked Competencies an Individual should Possess to be Successful in the Agricultural Sales Profession

	<i>f</i>	<i>%</i>
Yes	21	100.00
No	0	0.00

Table 8
Agreeability of Ranked Topics that should be included in Agribusiness Sales Curriculum

	<i>f</i>	<i>%</i>
Yes	20	95.00
No	1	5.00

Table 9
Agreeability of Ranked Competencies Used in the Daily Workings of Agricultural Sales Professionals

	<i>f</i>	<i>%</i>
Yes	20	95.00
No	1	5.00

As seen in the results above, a consensus was created for all three questions as participants voted in favor for the rankings of competencies and curriculum topics found in round two of the survey.

Conclusions

This study was successful in determining the opinions of where education should be headed and how to help develop successful incoming sales employees from industry professionals in agricultural sales. Bridging the gap between education and industry is an ongoing process and will continually evolve as time goes on. For this study, it was found that

successful sales professional should be one to uphold the traits of integrity and professionalism, the individual should be able to communicate well in all environments and build lasting relationships.

Assessing the demographics of the participants was the goal of objective one of this study. The U.S. Bureau of Labor Statistics estimates that women are significantly underrepresented in the agricultural industry, making up only about 26% of employment (2014). Research over the last few decades has shown an increase in the amount of women in the sales industry; however, the data collected from this study gave a different perspective with only 5.56% of the population surveyed being female. Participants varied in ages, with all participants being 21 or older, and the majority of the group falling between 26 and 50 years of age ($n=21$). The sales professionals' experience in their current position was equally distributed from zero years to ten or more years. All participants had at least their high school diploma, but most had earned their Bachelors' degree in Agricultural Economics 22.22%, Agricultural Business 16.67%, or Animal Science 16.67%. Other participants continued their education beyond a Bachelors' degree and gained specific content knowledge degrees in accounting, business, and marketing.

Participants mostly favored with being extraverts, while only eight of the 36 surveyed defined themselves as introverted, 22.22%. Similarly, participants heavily sided as relationship oriented 61.11%, rather than task oriented 33.33%. Two individuals surveyed stated "you can't have one without the other," and therefore they make up the outlying 5.56%.

To reach objective two, participants were asked what competencies were needed for someone to be successful in the sales industry. These skills and traits are the ones desired for graduates to develop over their time in college to then productively enter the sales career field. A

consensus was formed as the majority, *100%* of the participants agreed with the ranked list. To the surprise of the researcher, personality traits ranked eighth on the list by a large majority $M=6.48$. Personality traits include, self-motivated, passionate, hardworking, friendly and outgoing. When people are more passionate, outgoing, and nurturing they tend to have more followers; the same is seen for sales professionals who display these characteristics, as they seem to have more dedicated and respectful customers (Bass, 1990b). Of the 141 different answers provided by participants, 31% were in some way related to personality traits, proving personality plays a large role in the success of an individual in the sales industry, so to be ranked last of the determined themes proves there are many factors that weigh heavily on being successful in the agricultural sales industry. On the opposite end of the ranked list was integrity being listed first with a mean of 1.88, not much of a surprise with honesty, integrity and trustworthiness making up a total of 14% of the responses from round one. Nonetheless, the remaining six themes fell closely in the rankings falling between a mean of 3.60 and 5.60.

Objective three was guided by the desire to understand what competencies the sales individuals used on a daily basis to be successful in their careers. Responses varied from relationship with customers to communication skills and self-motivation to time management. These skills are further described in the 2011 Association of Public and Land-Grant Universities study to understand what skills are important for new graduates to have when entering the workforce. In the cluster of Self-Management, which ranked third out of seven when ranked by industry professionals, efficient and effective work habits was the most sought after skills for new employees to have (Crawford, Lang, Fink, Dalton & Fielitz, 2011). From the 110 responses given, eight themes were developed. Participants heavily rely on integrity and least favorably with personality traits including effective time management, ability to delegate and self-

discipline. Of the 110 different answers from round one given, 11.82% of responses were in some way related to the relationship with the customer.

The final objective, to determine curriculum topics that should be included in Agricultural Sales courses. The means of this question were closely related, only spanning from 3.00 to 6.72, showing that each topic held a high priority for the participants and each should be carefully considered when teaching an agricultural sales course. A consensus of the created themes and rankings was developed with 95% agreeability. Of the nine themes created, integrity was ranked first, $M=3.00$, similar to the other questions rankings. It is seen time after time for honesty, a portion of the integrity group in this study, to rank at the top of the list of desired competencies employers seek in new employees (Kouzes & Posner, 2011). Sales professionals felt practical application was least important from the list of themes provided, for students to gain while in college sales courses. Practical application can come in the forms of internships, job shadowing and interactive sales experiences through mentoring programs, guest lectures, case studies and more. It is also deemed important to have a fundamental, basic, knowledge of the agriculture industry such as animal science, crop science, agricultural education, and communication disciplines and economics, $M = 6.44$.

Recommendations

This study was successful in reaching the desired objectives. Recommendations from the researcher are to conduct similar studies in other academic subjects to help bridge the gap between education and industry. “Our colleges and universities not only educate each new generation of leaders in government, business, science law, medicine, the clergy, and other advanced professions, but are also responsible for setting the curriculum standards and training the personnel who will educate the entire citizenry at the precollegiate level” (Astin & Astin,

2000, p. 1). With a high population of students graduating and the job market being flooded, it is crucial to have skill specific graduates to enter the work force (DuPre & Williams, 2011).

Additionally, the information found in this study, pertaining to the curriculum topics that should be taught should be crosschecked with the current sales curriculum. The curriculum topics discussed in the final objective should be evaluated by agribusiness sales professors and validated with current curriculum being taught. These curriculum key points could have impact on students' knowledge base and critical skills to be placed in a career outside of graduation and to be successful in the sales industry. Professors and faculty members should take the results provided in this study and evaluate their students to see if the characteristics their students pertain are matching those sought after by employers.

As for industry recommendations, employers may consider using personality assessments during the hiring process to gain knowledge of the individuals character traits, values, and strengths as it is seen that personality plays a large role in the success of an individual in the industry from the data collected in this study. Industry professionals may also consider partnering with their local universities to collaborate and develop trainings students can go through to be prepared to enter the sales workforce.

The researcher would suggest reevaluating other methods to collect data, or at least reconsider the modified Delphi method, but doing all rounds in person and at the same time. Other data collection methods may include focus groups or individual qualitative interviews. Through doing the study in person, other data, such as appearance, tone and fluency of a persons' speech, and other physical attributes could be accounted for to understand traits found in salespersons (Bass, 1990a).

A final recommendation for future research would be to do follow up studies over the course of the next five years to see if desired competencies and curriculum topics have developed as leadership is continually developing and education pertaining leadership will also continue to change (Crawford, Gould, Scott, 2003).

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Appendices

Appendix A
Questionnaire Round 1

Consent Form for Agricultural Sales Leadership Competencies Study

You have been asked to participate in a research project studying desired competencies to be successful in the Agricultural Sales profession. The overall purpose of this research project is to determine competencies which should be exhibited by career seeking graduates as deemed by successful individuals currently in the industry. You were selected to be a possible participant because you are a sales professional who serves as a mentor for the students enrolled in the Agribusiness Sales course for the current semester at Oklahoma State University.

If you agree to participate in this study, you will complete a total of three questionnaires to be given at three different times. Each round of questions will be developed from the answers of previous rounds. The three assessments will take approximately 15 minutes each to complete.

Your participation in these assessments is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Oklahoma State University being affected.

This study is confidential to the extent allowed by law and University policy, and all data will be reported as group data. No identifiers linking you to this study will be included in any sort of report that might be published. Research records will be stored securely and only Committee Chair's Name (Institution) or Researcher's Name will have access to the records.

If you have questions regarding this study, you may contact Committee Chair's Name at (xxx) xxx-xxxx or emailaddress@uark.edu.

This research study has been reviewed by the Institutional Review Board at the University of Arkansas. For research-related problems or questions regarding your rights as a research participant, you can contact Ro Windwalker, the University's Compliance Coordinator, at (479) 575-2208 or email irb@uark.edu.

Please indicate below your consent to participate in this study by checking a box below.

Yes

No

1. What is your gender
 - a. Male
 - b. Female

2. In what range does your age fall

a. <20	e. 36-40	i. 56-60
b. 21-25	f. 41-45	j. 61-65
c. 26-30	g. 46-50	k. 66>
d. 31-35	h. 51-55	

3. What is your official job title?

4. What company are you employed by?

5. How many years have you been in your current position
 - a. 0-2
 - b. 3-5
 - c. 6-9
 - d. 10>

6. What is the highest degree of education that you have completed
 - a. GED
 - b. High School Degree
 - c. Bachelor's Degree
 - d. Master's Degree
 - e. MBA
 - f. Doctoral Degree

7. What was the concentration of your degree?

8. Do you associate yourself more with being an introvert or an extrovert? (Introvert – one who internally derives energy, is drained by too much social interaction; Extrovert – preference for obtaining information, inspiration, and energy from outside the self, gathering energy from social atmospheres (Northouse, 2013, p. 330-331).
 - a. Introvert
 - b. Extrovert

9. Do you associate yourself more with being task oriented or relationship oriented? (Task – concerned primarily with reaching a goal; Relationship – concerned with developing close interpersonal relationships (Northouse, 2013, p.124).
 - a. Task Oriented
 - b. Relationship Oriented

10. What is your current e-mail address?

Appendix B
Questionnaire Round 2

Consent Form for Agricultural Sales Leadership Competencies Study

You have been asked to participate in a research project studying desired competencies to be successful in the Agricultural Sales profession. The overall purpose of this research project is to determine competencies which should be exhibited by career seeking graduates as deemed by successful individuals currently in the industry. You were selected to be a possible participant because you are a sales professional who serves as a mentor for the students enrolled in the Agribusiness Sales course for the current semester at Oklahoma State University.

If you agree to participate in this study, you will complete a total of three questionnaires to be given at three different times. Each round of questions will be developed from the answers of previous rounds. The three assessments will take approximately 15 minutes each to complete. This is the second round of the study. You are receiving this consent form to insure that you are willing to continue with your participation of this study.

Your participation in these assessments is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Oklahoma State University being affected.

This study is confidential to the extent allowed by law and University policy, and all data will be reported as group data. No identifiers linking you to this study will be included in any sort of report that might be published. Research records will be stored securely and only Committee Chair's Name (Institution) or Researcher's Name will have access to the records.

If you have questions regarding this study, you may contact Committee Chair's Name at (xxx) xxx-xxxx or emailaddress@uark.edu.

This research study has been reviewed by the Institutional Review Board at the University of Arkansas. For research-related problems or questions regarding your rights as a research participant, you can contact Ro Windwalker, the University's Compliance Coordinator, at (479) 575-2208 or email irb@uark.edu.

Please indicate below your consent to participate in this study by checking a box below.

- Yes
- No

Q1. Drag and drop items to rank the competencies an individual **should possess** to be successful in the Agricultural Sales profession. The ranking order should be first to last.

Items

Ranking (First to Last)

- Integrity
- Product and Industry Knowledge
- Personal and Professional Management
- Communication Skills (Verbal & Non-Verbal)
- Identification of Customer Needs
- Goal-Oriented and Results Driven
- Personality Traits
- Relationship and Interpersonal Skills

Q2. Drag and drop items to rank the topics that should be **included** in Agribusiness Sales curriculum to prepare students to enter the sales force. The ranking order should be first to last.

Items

Ranking (First to Last)

- Professionalism
- Adaptability and Ability to Cope with Rejection
- Marketing and Networking
- Fundamental Education of Economics and Agriculture
- Relationship and Interpersonal Skills
- Communication Skills (Verbal and Non-Verbal)
- Integrity
- Practical Application
- Self-Motivation and Goal Orientation

Q3. Drag and drop items to rank the leadership competencies you use **in your job** as a sales professional. The ranking order should be first to last.

Items

Ranking (First to Last)

- Self-Motivation
- Product and Market Knowledge
- Personality Traits
- Communication Skills (Verbal and Non-Verbal)
- Continuous Learning and Adaptability
- Personal Organizational Skills
- Integrity
- Relationship Building

Appendix C
Questionnaire Round 3

Q1.

Consent Form for Agricultural Sales Leadership Competencies Study

You have been asked to participate in a research project studying desired competencies to be successful in the Agricultural Sales profession. The overall purpose of this research project is to determine competencies which should be exhibited by career seeking graduates as deemed by successful individuals currently in the industry. You were selected to be a possible participant because you are a sales professional who serves as a mentor for the students enrolled in the Agribusiness Sales course for the current semester at Oklahoma State University.

If you agree to participate in this study, you will complete a total of three questionnaires to be given at three different times. Each round of questions will be developed from the answers of previous rounds. The three assessments will take approximately 15 minutes each to complete. This is the third and final round of the study. You are receiving this consent form to insure that you are willing to continue with your participation of this study.

Your participation in these assessments is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Oklahoma State University being affected.

This study is confidential to the extent allowed by law and University policy, and all data will be reported as group data. No identifiers linking you to this study will be included in any sort of report that might be published. Research records will be stored securely and only Committee Chair's Name (Institution) or Researcher's Name will have access to the records.

If you have questions regarding this study, you may contact Committee Chair's Name at (xxx) xxx-xxxx or emailaddress@uark.edu.

This research study has been reviewed by the Institutional Review Board at the University of Arkansas. For research-related problems or questions regarding your rights as a research participant, you can contact Ro Windwalker, the University's Compliance Coordinator, at (479) 575-2208 or email irb@uark.edu.

Please indicate below your consent to participate in this study by checking a box below.

- Yes
- No

Q2.

Based from the results of round 2, the following is the ranking of competencies an individual should possess to be successful in the Agricultural Sales profession. Validate the order by marking **yes** if you agree, or **no** if you do not agree. *Please allow minor flexibility as we are trying to reach a consensus, to agree means to approve of over 50% of the ranking order.*

1. Personality Traits
2. Personal and Professional Management
3. Goal-Oriented and Results Driven
4. Product and Industry Knowledge
5. Identification of Customer Needs
6. Relationship and Interpersonal Skills
7. Communication Skills (Verbal & Non-Verbal)
8. Integrity

- Yes – Agree
- No – Disagree

Q3.

Based from the results of round 2, the following is the ranking of topics that should be included in Agribusiness Sales curriculum. Validate the order by marking **yes** if you agree, or **no** if you do not agree. *Please allow minor flexibility as we are trying to reach a consensus, to agree means to approve of over 50% of the ranking order.*

1. Practical Application
2. Fundamental Education of Economics and Agriculture
3. Marketing and Networking
4. Adaptability and Ability to Cope with Rejection
5. Self-Motivation and Goal Orientation
6. Communication Skills (Verbal & Non-Verbal)
7. Relationship and Interpersonal Skills
8. Professionalism
9. Integrity

- Yes – Agree
- No – Disagree

Q4.

Based from the results of round 2, the following is the ranking of competencies you as sales professionals use in your job. Validate the order by marking **yes** if you agree, or **no** if you do not agree. *Please allow minor flexibility as we are trying to reach a consensus, to agree means to approve of over 50% of the ranking order.*

1. Personal Organizational Skills
2. Personality Traits
3. Continuous Learning and Adaptability
4. Communication Skills (Verbal & Non-Verbal)
5. Product and Market Knowledge
6. Relationship Building
7. Self-Motivation
8. Integrity

- Yes – Agree
- No – Disagree

Appendix D
Participant Letter Round 2

Participants of the Agricultural Sales Study,

Thank you for your assistance with the sales course at Oklahoma State University. Last semester, you were asked to provide you honest input regarding the skills and traits that contribute to success in the sales industry. Our team has compiled your answers and we need your help in further refining the results. Please click the following link:

https://waltonuark.az1.qualtrics.com/SE/?SID=SV_5iGCzy1XF13xCER

To access the survey. The survey will take approximately 15 minutes to complete. The survey responses will be kept anonymous. The answers will be analyzed and categorized to determine a rank order. In a few weeks, you will be asked once again to complete a short survey. Your input is allowing us to determine how we can best prepare students to enter the sales force. Your input is valued and is critical to the success of this study. If you have any questions please contact Researcher's Name at researcher'semail@uark.edu. Thank you for your time and support!

Once again, the survey link is:

https://waltonuark.az1.qualtrics.com/SE/?SID=SV_5iGCzy1XF13xCER

Thank you,

Researcher's Name

Appendix E
Participant Letter Round 3

Participants of the Agricultural Sales Study,

Thank you for your assistance with the sales course at Oklahoma State University. Last month, you were asked to provide a ranking of characteristics regarding the skills and traits that contribute to success in the sales industry. Our team has compiled your answers and we need your help in further refining the results. Please click the following link:

https://waltonuark.az1.qualtrics.com/SE/?SID=SV_8eoQKfcW23Enlxb

To access the survey. The survey will take approximately 15 minutes to complete. The survey responses will be kept anonymous. This is the third and final round of the survey, you are being asked to confirm the ranking established in round 2 of the survey process. Your input is allowing us to determine how we can best prepare students to enter the sales force. Your input is valued and is critical to the success of this study. If you have any questions please contact Researcher's Name at researcher'semail@uark.edu. Thank you for your time and support!

Once again, the survey link is:

https://waltonuark.az1.qualtrics.com/SE/?SID=SV_8eoQKfcW23Enlxb

Thank you,

Researcher's Name

Appendix F

Participant Follow Up Letter Round 2

Participants of the Agricultural Sales Study,

I know several of you have completed the survey sent out last week, and I thank you for your participation. This is a reminder e-mail to hopefully get a few more responses. Therefore, if you have already completed the second round of the survey, please do NOT retake the survey know that your participation is greatly appreciated. However, if you have not completed the survey, please do so at this time, your input is very valuable. Please click the following link to access the survey: https://waltonuark.az1.qualtrics.com/SE/?SID=SV_8eoQKfcW23Enlxb

To access the survey. The survey will take approximately 15 minutes to complete. The survey responses will be kept anonymous. The answers will be analyzed and categorized to determine a rank order. In a few weeks, you will be asked once again to complete a short survey. Your input is allowing us to determine how we can best prepare students to enter the sales force. Your input is valued and is critical to the success of this study. If you have any questions please contact Researcher's Name at researcher'semail@uark.edu. Thank you for your time and support!

Once again, the survey link is:

https://waltonuark.az1.qualtrics.com/SE/?SID=SV_8eoQKfcW23Enlxb

Thank you,

Researcher's Name

Appendix G
Participant Follow Up Letter Round 3

Participants of the Agricultural Sales Study,

I know several of you have completed the survey sent out last week, and I thank you for your participation. This is a reminder e-mail to hopefully get a few more responses. Therefore, if you have already completed the third round of the survey, please do NOT retake the survey know that your participation is greatly appreciated. However, if you have not completed the survey, please do so at this time, your input is very valuable. Please click the following link to access the survey: https://waltonuark.az1.qualtrics.com/SE/?SID=SV_8eoQKfcW23Enlxb

The survey will take less than 15 minutes to complete. The survey responses will be kept anonymous. This is the third and final round of the survey, you are being asked to confirm the ranking established in round 2 of the survey process. Your input is allowing us to determine how we can best prepare students to enter the sales force. Your input is valued and is critical to the success of this study. If you have any questions please contact Researcher's Name at researcher'semail@uark.edu. Thank you for your time and support!

Once again, the survey link is:

https://waltonuark.az1.qualtrics.com/SE/?SID=SV_8eoQKfcW23Enlxb

Thank you,

Researcher's Name

CHAPTER IV: CONCLUSION

The two articles presented in this thesis explored the realm of leadership competencies in the agricultural sales force from the perspective of students studying the content area and also sales professionals in successful careers. It was found between the two studies leadership characteristics, skills and traits are an important part of having success in the agricultural sales industry. Leadership can certainly be measured in many different ways, but one thing is certain, the need for leaders in today's workforce is prominent (Smith & Hughey, 2006). It is important for students to retain general knowledge from their education program, but it is equally as important for student's to gain content specific knowledge for their career path and leadership skills such as communication and teamwork (Dunne & Rawlins, 2000). Although the two studies in this thesis were different, they were easily united as they were designed to help bridge the gap between education and industry and ensure students are being guided in the right direction to be successful in their career path.

In the first article, students were asked to fill out a pretest and posttest questionnaire to measure if there were any changes in leadership types or characteristics over the course of an academic semester. Participants involved in this study were enrolled in the Fall 2014 Agribusiness Sales course at [State] University. A total of 97 students participated in both the pre and posttest evaluations. The researcher found that students were mostly of junior status and majoring in Agricultural Business. Students tested noticeably less introverted as the semester went on, shifting from 36.08% to 27.84%. Upon completion of the Strengths Finder assessment from the posttest survey were students most accounted for strengths were; Belief, 47.42% ($n = 46$), Responsibility/Significance, 30.93% ($n = 30$), Responsibility/Significance, 30.93% ($n = 30$), Relator, 29.90% ($n = 29$), and Self-Assurance, 25.77% ($n = 25$). These characteristics were also seen as desired competencies of agricultural sales professionals found in the second study of this thesis. Recommendations were made to

conduct this research with a different data collection method, and to find the gap between education and industry to better equip students for the work force. The full results of the *Competencies of Agricultural Sales Students* study can be further examined in Chapter II of this thesis.

In the second article, the researcher conducted a Delphi study with a group of agricultural sales professionals. The sales professionals ($N = 40$) were asked to participate in a three-round questionnaire over the course of a few months. Participants were first asked to note desirable competencies of students graduating from college and entering the sales industry force, discuss topics of relevance and important for agribusiness sales courses, and describe skills and traits they used in their daily professional settings. After answers from round one of the questionnaire were analyzed and grouped together by the researcher, an expert panel worked to develop general themes. Round two asked participants to rank the themes in order of importance from first to last. The mean score of the results were analyzed and a final ranking was developed. Round three of the Delphi study asked the sales professionals to agree or disagree with the final ranking. With well over 60% agreeability for the rankings of each question, a consensus was developed. The researcher suggests further research in finding commonalities of suggested curriculum topics and ones currently implemented in the course, and also to complete this research in different areas of study. The full results of the *Competencies Desired by Agricultural Sales Professionals* study can be found in Chapter III of this thesis.

References

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- Smith, B. L., & Hughey, A. W. (2006). Leadership in higher education – its evolution and potential: A unique role facing critical challenges. *Industry and Higher Education*, 20(3), 157–163.