

ABSTRACT

BAUGHMAN, KRISTEN NICOLE. Leadership Skills of Directors, Commissioners and Secretaries of Agriculture. (Under the direction of Dr. Jackie Bruce).

The purpose of this mixed methods study was to describe characteristics of and identify and define the leadership skills of Commissioners. Quantitative research methods were used to describe Commissioner's self-perceived proficiency levels and perception of importance in six leadership skill areas. Then, gaps between their perceived proficiency levels and their perception of leadership skill importance were determined. Qualitative research methods were used to make meaning of the quantitative results. Major findings noted Commissioner's perceived importance and proficiency in the six leadership skill areas. Recommendations include youth organizations and universities to enhance their programs and involve Commissioners to provide leadership experiences for youth.

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Leadership Skills of Directors, Commissioners and Secretaries of Agriculture
North Carolina State University

by
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DEDICATION

I dedicate this thesis and degree to my family: my loving parents, Mitch and Jana Baughman, my grandparents, Jim and Barbara Baughman, and my siblings, Kevin and Kaley Baughman. Not only have you have given me the resources to complete my degree, you have been my source of encouragement. The famous family saying, “the sky’s the limit” is definitely true. You can do anything when you set your mind to it. Thank you for keeping me sane with all of the late night Facebook chat sessions, the emails with encouraging quotes and funny pictures, phone calls, frozen yogurt dates, and “market Sundays.” But most importantly, thank you for all of the love and support over the years and especially during my graduate program.

BIOGRAPHY

Kristen Baughman was born and raised in Charlotte, North Carolina. After graduating from high school in 2007, she began college at North Carolina State University as a Nutrition Sciences major because of her love of food and health. However, she knew she wanted to teach people about cooking and living a healthy lifestyle, which led her to switching her major to Extension Education with a concentration in Nutrition Sciences, finishing her bachelor's degree in December 2010. During her undergraduate career she began working as an intern with the North Carolina Department of Agriculture and Consumer Services, which led her to developing an interest in agricultural leadership. She began her graduate career in January 2011 in Extension Education with a concentration in Agricultural Leadership. In her graduate program, Kristen revealed in the research aspect, conducting studies on classroom leadership programs and curriculums, minority student leaders, and Commissioners of Agriculture. She hopes to continue on with research to a PhD program after several years spent working for the Department and other agricultural organizations.

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CHAPTER I: INTRODUCTION

Introduction

Departments of Agriculture in the United States are going through a period of great change due to budget restrictions, changes in government policies, and the diversity of public opinion regarding agriculture. Directors, Commissioners, and Secretaries of Agriculture (Commissioners) are elected or appointed officials who are the voice of agriculture for their state. When interacting with their co-workers, other agricultural leaders, the public and policymakers, Commissioners use their leadership skills. They respond to challenging issues and ultimately help to determine the future of the agriculture industry in their state.

This study utilized a mixed methods approach to identify and define the leadership skills of Commissioners (Fraenkel & Wallen, 1996). Quantitative research methods were used to describe Commissioner's self-perceived proficiency levels and perception of importance in six leadership skill areas. Then, gaps between their perceived proficiency levels and their perception of leadership skill importance were determined. Qualitative research methods were used to make meaning of the quantitative results.

State Departments of Agriculture

The United States Department of Agriculture (USDA) was established in 1862 by President Abraham Lincoln (United States Department of Agriculture, 2011). George Washington had previously proposed the creation of a National Board of Agriculture in 1796; however, it was not until 1862 when Congress urged President Lincoln to accept the idea (Graham, 1998). The USDA was created to “acquire and to diffuse among the people of the United States; useful information on subjects connected with agriculture in the most

general and comprehensive sense of that word, and to procure, propagate, and distribute among the people new and valuable seeds and plants” (United States Department of Agriculture, 2011, para. 1).

As states attempted to enforce their own regulations, inconsistencies between federal and state requirements created problems (Grant, 2006). Some states were also behind in their knowledge about planting techniques and other agricultural practices (Graham, 1998). Consistency in practices needed to exist among the states in order to move the United States’ agriculture industry forward in comparison to other countries. Georgia responded to these problems and in 1874 set up the first State Department of Agriculture, using the structure of the United States Department of Agriculture as a guideline (Grant, 2006). A secondary responsibility of the Georgia Department of Agriculture was to promote the state’s agricultural enterprises, which had struggled since the end of the Civil War (Grant, 2006).

Other states soon followed in Georgia’s footsteps and created their own Departments of Agriculture. For instance, the North Carolina Department of Agriculture was created in 1877 in response to Colonel Leonidas Polk witnessing the flourishing farms in Virginia during the Civil War. He thought North Carolina’s farms could become prosperous by disseminating valuable agricultural knowledge to the farmers (Graham, 1998). During this time, farmers were also being threatened by fertilizer dealers who were selling worthless materials (Graham, 1998). Thus, Colonel Polk urged the North Carolina General Assembly to establish a Department of Agriculture, to protect farmers’ interests.

Commissioners of Agriculture

In 1862, when the USDA was created, the “Commissioner of Agriculture” position was established to serve as “the chief executive officer of the Department of Agriculture” (United States Department of Agriculture, 2011). The Commissioner would receive monetary compensation, hold office by tenure similar to that of other civil officers, and would be appointed to the position by the President of the United States (United States Department of Agriculture, 2011). The Commissioner of Agriculture’s duty would be to acquire and preserve in his department all information concerning agriculture. The Commissioner of Agriculture would also collect agricultural statistics; collect, test, propagate, and distribute new and valuable seeds and plants among agriculturists; and create an annual report to the President about the Department of Agriculture’s expenditures (United States Department of Agriculture, 2011). To aid in his duties, the Commissioner of Agriculture would appoint a chief clerk and other employees skilled in the natural sciences pertaining to agriculture (United States Department of Agriculture, 2011).

While each of the 50 United States created a Department of Agriculture structured similarly to the USDA; each state Department of Agriculture is not exactly the same. Each state has designated a Commissioner of Agriculture to be the leader of their Department of Agriculture. The duties of the position vary among states, but their general role is to be the voice of agriculture in their state by promoting their state’s agricultural industry, while protecting consumers and the environment (National Association of State Departments of Agriculture, 2011). Commissioners regulate the many components of their state’s agriculture

industry and oversee their employees at the Department of Agriculture, who are knowledgeable in different agricultural fields.

Commissioners not only oversee their employees and the daily operations of the Department of Agriculture, they must also have the ability to generate, foster, and help implement future goals and expectations of their state. They hold a position within their state government; thus, they are involved with creating policies, and enforcing rules and regulations that are in place for the agriculture industry (National Association of State Departments of Agriculture, 2011).

The Commissioner is either publicly elected by the people of their state through the primary or general election processes, or they are appointed by the governor after going through an extensive search and interview process (National Association of State Departments of Agriculture, 2011). Table 1 represents the states that hold public elections for the Commissioner and those that have authorized their governor to appoint the Commissioner (National Association of State Departments of Agriculture, 2011). The Director, Commissioner or Secretary's length of service in their position within their state's Department of Agriculture varies widely from state to state.

Table 1

Appointed and Elected Commissioners by State

Elected Commissioners	Appointed Commissioners	
Alabama	Alaska	Nebraska
Florida	Arkansas	Nevada
Georgia	Arizona	New Hampshire
Iowa	California	New Jersey
Kentucky	Colorado	New Mexico
Louisiana	Connecticut	New York
Mississippi	Delaware	Ohio
North Carolina	Hawaii	Oklahoma
North Dakota	Idaho	Oregon
South Carolina	Illinois	Pennsylvania
Texas	Indiana	Rhode Island
West Virginia	Kansas	South Dakota
	Maine	Tennessee
	Maryland	Utah
	Massachusetts	Vermont
	Michigan	Virginia
	Minnesota	Washington
	Missouri	Wisconsin
	Montana	Wyoming

Challenges in Agriculture

Departments of Agriculture in the United States are going through a period of change. The agriculture industry is being impacted by changes in government policies due to the diversity of views regarding the environment, advances in technology, and budget restrictions. Commissioners respond to these challenging issues to determine the future of the agriculture industry in their state.

Reganold et al. (2011) reported that agriculture in the United States is at a critical juncture; U.S. farmers supply the population with food and other agricultural products, while

simultaneously contributing to environmental issues such as global greenhouse gases, biodiversity loss and natural resource degradation. Long-term sustainability of natural resources is an important concern to the agriculture industry. Farmers are now charged with using innovative ways to enhance the natural resource base and environment, while still being financially sound and providing abundant food, feed, fiber and fuel. Thus, policy reforms will continue to play a large role in determining the future of agriculture as it relates to sustaining food and ecosystem security (Reganold et al., 2011).

The agriculture industry is also being impacted by advances in technology, especially in precision agriculture tools. Precision agriculture tools include crop and field information gathering tools, variable rate technology and auto guidance systems (Adrian et al., 2004). Crop and field information gathering tools are used to develop management zones throughout fields. Depending on the farmer's goal for the management zone, variable rate technologies enable farmers to vary inputs to either increase yields or reduce costs. Lastly, auto guidance systems assist equipment operators in running equipment through the fields (Adrian et al., 2004). Advances in technology present a new challenge to farmers because to adopt and use these technologies, farmers must first make financial investments and then learn new skills.

State Departments of Agriculture are challenged by budget cuts when their State Legislature convenes to make plans for the next fiscal year. For instance, the Idaho Department of Agriculture's "challenges include that it has a long list of tasks required by statute and that its budget has a heavy dose of dedicated funds - basically fees from producers who expect to receive services for the money they pay" (Carlson, 2010). During hard budget

times, Commissioners must make difficult decisions to change funding for their Department of Agriculture's programs and services, as well as the salaries of their employees.

The need for strong leaders in agriculture is now more important than ever. There are six major leadership skill areas: human, conceptual, technical, communication, emotional intelligence, and industry knowledge skills (Moore & Rudd, 2004; Jones, 2006). Effective leadership in these six areas is required to take each state's agriculture industry through the next era of change, including environmental controversies, advances in technology and budget deficits. The Department of Agriculture is charged with helping farmers to implement environmentally friendly practices and to understand how to use new technologies, which is difficult to do with limited funding. Thus, Commissioners must exhibit leadership skills and possess the ability to encourage communication and compromise as they work on behalf of their state's Department of Agriculture.

Defining Leadership

Defining leadership is challenging because it is one of the most studied but least understood topics. Leadership is important to the success of every organization and scholars have their own definition of a successful leader.

Bennis and Nanus (1985) reported that

“effective leadership can move organizations from current to future states, create visions of potential opportunities for organizations, instill within employees commitment to change and instill new cultures and strategies in organizations that mobilize and focus energy and resources” (p. 17-18).

Effective leaders are not born; however, they emerge and assume the responsibilities for creating a vision to reshape organizational practices when an organization is facing a problem (Bennis and Nanus, 1985).

Similarly to Bennis and Nanus' (1985) leader, Pisapia's (2009) leader emerges to create a vision and move an organization forward. According to Pisapia (2009), "leaders are people who, singularly or with others, define and then move individuals, groups, and/or organizations from A to Z. 'A' represents where the organization and its members are currently, 'Z' represents what the organization and its members want to achieve" (p. 1). The challenge of being a leader today is that the space between "A" and "Z" is always changing; the world is becoming more interconnected because of changes in technology, the global economy, rapid international communication, an exponential increase in information, and a global environment (Pisapia, 2009). Leaders should aim to fit their organization to its environment, and should rethink, revise and restructure their organization for it to stay connected and continue to develop (Pisapia, 2009). An effective leader should be proactive. Leaders should position their organization to be ready to adapt and stay current with the numerous changes occurring in the world.

Ivancevich, Konopaske and Matteson (2011) define leadership as not occurring in a vacuum; it is the process of influencing others in an organizational setting to facilitate the attainment of challenging and relevant goals. Although leaders do not have to serve in a formal position, they must deal with three variables: the people who are being led, the task that the people are performing, and the environment in which the people and the task exist (Ivancevich et al., 2011). A leader must be cognizant of these three variables and adapt to

changes in order to effectively lead their organization. Similarly to Ivancevich, Konopaske and Matteson's (2011) leader, Northouse defines leadership as having influence over others (2004). Thus, leaders are successful if they are able to influence others in order to achieve their organization's goals (Northouse, 2004; Ivancevich et al., 2011).

According to Bass (1990), leadership is described in terms of behaviors. Leadership influences the attitudes of the organizational members and/or their behaviors. Thus, leadership behavior influences members of the organization to achieve organizational objectives (Bass, 1990). On the other hand, Hersey and Blanchard (1982) viewed leadership as situational. A leader will adopt a particular leadership style in response to the maturity level of the people the leader is trying to influence (Hersey and Blanchard, 1982). Maturity is defined as "the ability and willingness of people to take responsibility for directing their own behavior" (Hersey and Blanchard, 1982, p. 151). A leader adopts the appropriate combination of task behavior (direction) and relationship behavior (support) according to the maturity level of his or her followers (Hersey and Blanchard, 1982).

For purposes of this study, the researcher defined leadership as the process of influencing individuals in an organization to achieve their organization's goals, while taking into account the people who are being led, the task that the people are performing, and the environment in which the people and the task exist (Ivancevich et al., 2011).

Leadership Skills and Competencies

Leadership is an observable, learned set of skills and abilities (Kouzes & Posner, 2007, p. 339). According to Katz (1955), leadership skills are defined as "an ability which can be developed, not necessarily inborn, and which is manifested in performance, not

merely potential” (p. 33-34). Leadership skills were defined as the abilities and acquired tasks developed by an individual that are related to leadership; six major leadership skill areas include: human, conceptual, technical, communication, emotional intelligence, and industry knowledge skills (Moore & Rudd, 2004).

Competence is defined as the capability of an individual to perform a task using his or her knowledge, education, skills, and experience (Herringer, 2002). Pernick (2001) reported a relationship between leadership skills and competencies; identifying critical leadership competencies required for effectiveness in an organization ultimately helps define what skills leaders need. Bennis and Nanus (1985) reported that leadership competencies can be learned, and “have remained constant, but our understanding of what it is, how it works, and the ways in which people learn to apply it has shifted” (p. 3).

Need for the Study

Although the skills of leaders from land-grant institutions and Extension have been researched, an assessment of leadership competency of Commissioners in the 50 United States has not been conducted. By studying their leadership skills, it will draw a clearer picture as to what Commissioners need in order to lead their state Department of Agriculture effectively through a changing agricultural era. This study is important because it could demonstrate what leadership skills should be further developed by Commissioners and at which leadership skills they are proficient.

This study will contribute to the general body of knowledge related to leaders and leadership. In practice, the results of this study could lead to a better understanding about the skills needed by leaders in the field of agriculture. Youth organizations and leadership

educators could also develop and make changes to leadership programs to prepare students to become future agriculture leaders.

Purpose and Objectives of the Study

Commissioners have been designated as the individuals responsible for leading their state's Department of Agriculture through a controversial and changing agricultural climate. With this significant responsibility in mind, the purpose of this study was to describe characteristics of and identify and define the leadership skills needed by Commissioners overseeing their state Department of Agriculture. The level of importance and self-perceived level of proficiency of current Commissioners was assessed in each of the six leadership skill areas defined by Moore and Rudd (2004).

This research addressed the following objectives:

1. Determine the demographic characteristics of Commissioners of Agriculture (gender, length of term, age, academic background, past leadership roles, and past leadership training).
2. Assess level of perceived importance of leadership skills, as determined by Commissioners of Agriculture.
3. Assess self-perceived proficiency of leadership skills of Commissioners of Agriculture.
4. Identify gaps in leadership skills and proficiency level of Commissioners of Agriculture.

Definition of Terms

- Department of Agriculture: An agricultural organization serving to be the voice of agriculture for a state by promoting the state's agricultural industry, while protecting consumers and the environment (National Association of State Departments of Agriculture, 2011).
- Director, Commissioner and Secretary of Agriculture (Commissioner): For this study the term Commissioner will be those individuals listed by the National Association of State Departments of Agriculture as the Director, Commissioner or Secretary of Agriculture.
- Leadership: Leadership does not exist in a vacuum; it is the process of influencing individuals in an organization in an attempt to achieve their organization's goals, while taking into account the people who are being led, the task that the people are performing, and the environment in which the people and the task exist (Ivancevich et al., 2011).
- Leadership skills: The abilities and acquired tasks developed by an individual that are related to leadership; six major leadership skill areas include: human, conceptual, technical, communication, emotional intelligence, and industry knowledge skills (Moore & Rudd, 2004).

Assumption of the Study

The researcher assumes the respondents completed the questionnaire honestly, and assumes the information to be true and accurate.

Summary

This chapter provided the background and significance of the problem, as well as the purpose of the study. The agriculture arena is undergoing a significant time of change, and Commissioners are responsible for ensuring success for their state's agriculture industry. These changes include advances in technology, budget deficits, and controversies in agriculture. This study sought to examine Commissioners' level of importance and self-

perceived leadership skills. This chapter provided objectives and defined significant terms used in the study.

CHAPTER II: THEORETICAL FRAMEWORK AND REVIEW OF RELATED RESEARCH

Introduction

The purpose of this chapter is to present the literature related to leadership skills that contributed to this study. This chapter will focus on the literature that describes leadership variables and their effect on leadership skills, and will set the theoretical framework for the study.

Theoretical Framework

The theoretical framework (see Figure 1) for this study is based on Moore and Rudd's (2004) study of the leadership skills and competencies of Extension directors and administrators, and Jones' (2006) study of the leadership skills of academic program leaders in colleges of agricultural and life sciences. By having proficiency in the leadership skill areas, leaders will be successful (Moore & Rudd, 2004).

In Moore and Rudd's study (2004) a purposive sample of Extension leaders in state director and administrator positions from 1862 and 1890 land-grant institutions participated in qualitative interviews. The interviews were conducted in order to identify the leadership skills necessary to be a leader within the Cooperative State Research, Education, and Extension Service (CSREES). Moore and Rudd (2004) identified six major leadership skill areas. Forty-five leadership skills were clustered into one of the six leadership skill areas and then a total of 80 leadership competencies were developed. Interrelationships existed between the leadership skills within and between skill areas, supporting the notion that "leadership cannot exist in a vacuum" (Moore & Rudd, 2004, p. 32). Jones' (2006) study of

academic program leaders in colleges of agricultural and life sciences further exemplified the leadership skills needed by leaders in the agriculture field as noted in Moore and Rudd's study (2004). Academic program leaders determined the importance and their self-perceived proficiency level in each of the six leadership skills using a leadership skills questionnaire (Jones, 2006). Data were gathered from 56 academic program leaders to determine the gaps between the academic program leaders' perceived leadership skill importance and proficiency level. Thus, the major leadership skill areas that served as the basis for this study were: human, conceptual, technical, communication, emotional intelligence, and industry knowledge skills (Moore & Rudd, 2004; Jones, 2006).

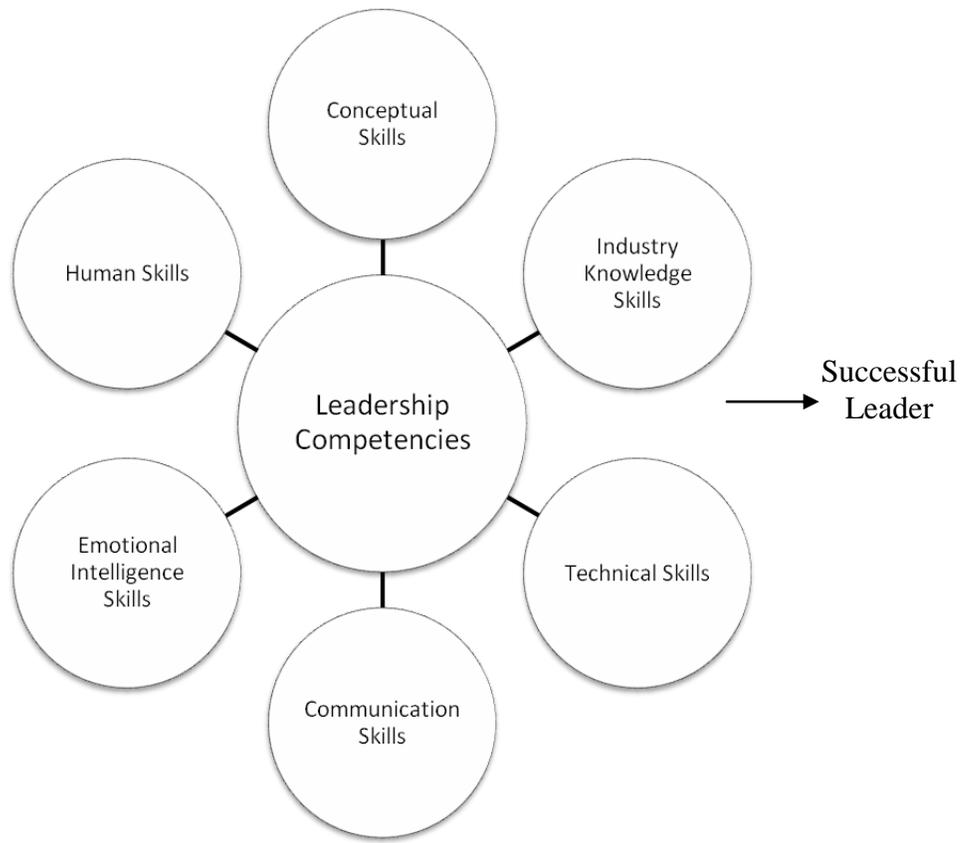


Figure 1

Theoretical Framework

Technical Skills

There are three categories of skills needed by leaders: technical, conceptual and human (Katz, 1955). According to Katz (1955), technical skills include “specialized knowledge, analytical ability within that specialty, and facility in the use of the tools and techniques of the specific discipline” (p. 34). Technical skills are required by the majority of people in an organization and are important at the lower levels of the organization’s

administration. For instance, an executive of an organization does not need to know how to perform specific tasks at the organization's operational level (Hersey and Blanchard, 1982). To be effective in an organization, less technical skill tends to be needed as a person advances from lower to higher levels in the organization (Hersey and Blanchard, 1982).

On the other hand, some technical skills are needed by upper levels of the organization's administration (Moore & Rudd, 2004). After conducting phone interviews with Extension directors and administrators, Moore and Rudd (2004) identified that technical skills include budgeting, finance and fundraising, computer skills, and internet skills. Leaders in an organization must be able to interpret and explain organizational budgets, as well as adjust and implement budgets to achieve the organization's goals (Moore & Rudd, 2004). Leaders must also have the skills to communicate with foundations and raise money from external sources (Moore & Rudd, 2004). Lastly, leaders must have an understanding of how to effectively use the internet and computer software (Moore & Rudd, 2004).

Jones' (2006) study determined that technical skills were perceived as the least important skills to academic program leaders. These leaders also believe they have the least amount of proficiency in the technical skills area. Technical skills were least important because other people in the organization were able to conduct tasks requiring these skills for the academic program leader (Jones, 2006).

Conceptual Skills

Conceptual skills refer to leaders being able to view an organization as a whole; recognizing that the functions of the organization depend upon one another and changes impact the entire organization (Katz, 1955). Katz (1955) reported these leaders will also have

an understanding of the relationship of their individual organization “to the greater industry, community, and the political, social, and economic forces of the nation as a whole” (p. 35-36). Due to their understanding of these relationships, leaders make decisions in a way which advances the over-all welfare of the total organization.

Conceptual skills are important for leaders to possess who are serving at the top level within their organization (Katz, 1955). People serving in high level positions within an organization should understand how all of the functions in an organization “are interrelated in accomplishing the goals of the total organization” (Hersey and Blanchard, 1982, p. 5). Thus, leaders serving in high level positions must have an excellent understanding of their organization in order to make effective decisions and successfully lead their organization in the future.

Moore and Rudd (2004) identified the following conceptual skills necessary for upper level leaders: having a vision, supporting organizational change, setting and achieving goals, critical/creative thinking, decision making, and strategic/sequential planning.

Jones (2006) determined that academic program leaders perceived an above average proficiency in the area of conceptual skills. These leaders also deemed the conceptual skill area as the second most important leadership skill out of the six categories (Jones, 2006).

Human Skills

A leader possesses human skills by working effectively with people as a group member and creating a collaborative atmosphere for the group (Katz, 1955). Leaders with highly developed human skills are aware of their attitudes, assumptions, and beliefs about other individuals and groups (Katz, 1955). These leaders are accepting that diversity in

viewpoints exist both in and outside of the organization, and might be different from their own viewpoints. They encourage members of their organization to freely express themselves and create an atmosphere of openness (Katz, 1955). These leaders will also be able to examine other's behaviors and words in order to skillfully communicate to others. Katz (1955) reported that human skills are important at all levels of an organization. Leaders of an organization must be cognizant of their organization's human/social system, which is focused on the motivation and needs of the members of the organization and on the leadership provided or required (Hersey and Blanchard, 1982).

Moore and Rudd (2004) identified that human skills include: mentoring, coaching, leadership development, identifying talent, cultural awareness/diversity, being a team leader, evaluating people, being a team member/player, being open/approachable, and being a relationship builder.

Jones' (2006) study determined that human skills were the most important leadership skills for academic program leaders. These leaders also believe they are most proficient in the human skills area.

Emotional Intelligence Skills

Goleman (1998) noted a different approach to leadership skills, which are built upon Katz's (1955) approach to the technical, human, and conceptual skill classification. Goleman (1998) identified three categories of leadership skills, which are technical skills, cognitive abilities, and emotional intelligence. Effective leaders should have a high degree of emotional intelligence, which encompasses five components: self-awareness, self-regulation, motivation, empathy, and social skill (Goleman, 1998).

Self-awareness, self-regulation, and motivation are the first three categories of emotional intelligence, which involve the leader's self-management skills. Leaders with strong self-awareness have a deep understanding of their emotions, strengths, weaknesses, needs, and drives; and they are honest with themselves and others (Goleman, 1998).

Goleman (1998) refers to the second component of emotional intelligence, self-regulation, as "an ongoing inner conversation...that frees us from being prisoners of our feelings" (p. 85).

People engaged in such a conversation are able to control their negative feelings and moods and channel them in useful ways for the organization (Goleman, 1998). Motivation is the third component of emotional intelligence, which effective leaders should possess. These leaders are driven to achieve beyond their expectations and other's expectations, and set the bar high for themselves and their organization (Goleman, 1998).

Empathy and social skill are the last two categories of emotional intelligence and deal with a leader's ability to manage relationships with other people. Leaders exhibit empathy by thoughtfully considering their employees' feelings as part of the decision-making process.

Goleman (1998) noted that social skill is "friendliness with a purpose: moving people in the direction you desire" (p. 90). Successful leaders have a large circle of acquaintances, and this network of people is in place when it comes time for the leaders to make decisions (Goleman, 1998).

Moore and Rudd (2004) identified that emotional intelligence skills include: time management and being balanced in one's life, resolving conflict, emotional maturity, motivation, controlling emotions, and respect time commitments of others.

Jones' (2006) study determined the largest and most significant difference between perceived leadership skill importance and proficiency level occurred in the emotional intelligence skill area. The level of importance for emotional intelligence skills was rated higher and the level of proficiency for the skills was rated lower by the academic program leaders.

Industry Knowledge Skills

Robbins, Bradley, and Spicer (2001) conducted a study to examine the leadership competencies of graduates of healthcare administration programs. The researchers designed a leadership competency instrument by conducting a comprehensive review of literature and “open-ended interviews with key informants from a set of administrative fellowship and residency programs and academic programs” (Robbins et al., 2001, p. 191). The leadership competency instrument included questions pertaining to four leadership skill domains: technical skills, industry knowledge skills, analytic and conceptual reasoning skills, and interpersonal and emotional intelligence skills (Robbins et al., 2001). The researchers noted that industry knowledge is gained through education and work experience. Thus, industry knowledge was referred to as an important domain of skills because graduates of healthcare administration programs must have an extensive knowledge of the healthcare industry.

Not only are industry knowledge skills important in the field of healthcare, they are also important for leaders involved in agriculture (Moore & Rudd, 2004). Moore and Rudd (2004) identified that industry knowledge skills include: understanding the context and/or role of the organization, knowing the constituents base and understanding their cultural base,

knowing the political environment influencing the organization, and understanding the importance of the organization at a national level.

Jones' (2006) study determined that academic program leaders believe industry knowledge skills are important, and they perceived themselves as having an average proficiency level in this leadership skill area.

Communication Skills

Moore and Rudd (2004) discovered that communication skills emerged during their study of the leadership skills and competencies of Extension directors and administrators. The researchers noted that communication skills are necessary for these leaders when they are interacting with members of their organization and people outside of their organization, like the media. A leader must be an effective communicator, as well as an effective listener in order to carry out the mission of their organization and fully understand other's opinions. The communication skills identified by Moore and Rudd (2004) include: media interaction, electronic communication, reading skills, recognizing the types of communication to use in a particular setting, speaking skills, and listening skills.

Leaders are significant contributors to the interactions that occur in their organization (Bass, 1990). Communication with others differentiate leaders who are effective from those who are not (Bass, 1990). An effective leader must be able to communicate with others within and outside of the organization. Oral and written communication skills are the most fundamental because the majority of leadership activities require these primary skills (Mumford, Campion and Morgeson, 2007). Although channels of oral communication are favored over channels of written communication, both of these skills are fundamental (Bass,

1990). When oral and written communication channels are be joined by electronic communication and information systems, a leader's network is significantly expanded (Bass, 1990). Electronic communication also provides a leader with instant contact, which decreases organizational distance (Bass, 1990). Thus, a leader must use oral and written communication skills in conjunction with electronic information systems in order to be effective and increase their network.

Academic program leaders in Jones' (2006) study determined that they have an average proficiency level in the communication skills area and they believe this leadership skill area is very important.

Review of Salient Literature

Numerous studies have been conducted about leadership skills and competencies needed by leaders in the business, healthcare, and agriculture fields. Commissioners are involved in each of these fields because they oversee the Department of Agriculture, agricultural productivity, and the health of the consumers in their state.

Jain (2011) conducted a meta-analysis of entrepreneurial competencies from previous research and developed "A Simple Framework of Entrepreneurship and Entrepreneurial Competencies." The framework included the entrepreneurial competencies needed by a potential entrepreneur or owner/manager of an entrepreneurial firm. Commissioners are similar to these leaders in the business field because they oversee the Department of Agriculture's daily functions and manage their employees. These competencies were broken into two categories; entrepreneur's motives, and entrepreneur's attitudes and personal characteristics. The entrepreneur's motives included the need for: achievement, personal

growth and development, independence/autonomy/personal control, social recognition and respect, social security and greater comfort for the self and family, money/wealth, and enjoying creative, innovative and path-breaking work. The entrepreneur's attitudes and personal characteristics included: innovativeness, creativity, pro-activity, risk-taking propensity, internal locus of control, self efficacy, tolerance for ambiguity, social intelligence, extraversion, and personal and family background. The competencies presented in Jain's (2011) framework are necessary for the success of entrepreneurial performance.

Müller and Turner (2009) examined the leadership competency profiles of successful project managers using the Leadership Development Questionnaire (LDG) to profile intellectual, managerial, and emotional competencies. Commissioners are similar to project managers because they oversee each division's programs and projects within the Department of Agriculture. The LDG was administered as a web-based questionnaire to members of professional organizations in project management, which resulted in 400 responses. Projects were categorized by complexity, importance, and contract type, as well as their application types, which included: engineering and construction, information and telecommunication technology, and organizational change (Müller and Turner, 2009). Results indicated that competency profiles differed in successful managers depending on their project type. Project managers also contained high competency levels in the areas of critical thinking, influence, motivation, and conscientiousness (Müller and Turner, 2009).

The Healthcare Leadership Alliance (HLA) is composed of major professional associations in the healthcare field. A study was conducted using a task force of individuals in the HLA to identify major competencies needed by healthcare leaders and executives

(Steft, 2008). Commissioners are required to work closely with the healthcare field. They are responsible for overseeing the health of the consumers in their state and for ensuring the safety of agricultural products. The task force reviewed healthcare credential and certification requirements of the organizations in HLA, and determined five competency domains were common among all practicing healthcare managers: communication and relationship management, professionalism, leadership, knowledge of the healthcare system, and business skills and knowledge (Steft, 2008). The HLA Competency Model was developed, which includes these five competencies necessary for leaders in the healthcare field.

Khalil et al. (2009) conducted a study to determine the influence of human resource development competencies on the performance of agricultural extension agents in Yemen. Commissioners oversee the Department of Agriculture, which is responsible for implementing agricultural programs in the state, similar to the field of agricultural extension. The researchers collected data from 290 extension agents and utilized a questionnaire, which measured human resource development competencies and performance. The human resource development competencies in program implementation, program evaluation, and program planning, contributed significantly to the performance of the extension agents (Khalil et al., 2009). Thus, high proficiency levels in these competencies ultimately determined the success of an extension agent.

Commissioners are leaders in the field of agriculture. Mirani et al. (2003) conducted a study of agricultural leaders in Hyderabad District using a descriptive survey design to determine the leadership competencies needed by these leaders. The researchers collected data from 150 agricultural leaders and reported that five leadership competencies were

perceived by the agricultural leaders as important to their job: following a democratic procedure, maintaining a positive attitude, accepting and carrying out responsibilities, communicating clearly using written methods, and establishing and posting work (Mirani et al., 2003). The researchers noted the level of proficiency for each competency varied among the leaders; thus, continuous educational programs are needed for leaders in the agricultural field to be skilled in their profession (Mirani et al., 2003).

Summary

Chapter II discussed the theoretical frame by further examining each leadership skill area: human, conceptual, technical, communication, emotional intelligence, and industry knowledge. The six leadership skill areas are necessary for successful leaders to possess; however, from the bottom to the top of the organization's structure, the amount of each skill that a leader contains may vary depending on their position. The conceptual frame was also discussed in this chapter and examined various leadership competency studies.

CHAPTER III: METHODOLOGY

Purpose of the Study

Responding to challenging issues and ultimately determining the future of the agriculture industry in their state is a daunting task for a Commissioner of Agriculture. These individuals have been charged with guiding their state Department of Agriculture during a time of change in the agricultural arena. The purpose of this study was to determine the characteristics of and identify and describe the leadership skills of Commissioners of Agriculture. Demographic variables of the Commissioners were included to draw a clearer picture of the individuals currently holding appointed or elected leadership positions, what previous leadership training they have had, and where gaps exist between their perception of leadership skill importance and leadership proficiency.

Research Objectives

Four specific research objectives were identified:

1. Determine the demographic characteristics of Commissioners of Agriculture (gender, length of term, age, academic background, past leadership roles, and past leadership training).
2. Assess level of perceived importance of leadership skills, as determined by Commissioners of Agriculture.
3. Assess self-perceived proficiency of leadership skills of Commissioners of Agriculture.
4. Identify gaps in leadership skills and proficiency level of Commissioners of Agriculture.

Institutional Approval

In accordance with North Carolina State University policy, prior to any collection of data, a proposal to conduct research for non-medical projects was submitted to the North Carolina State University Institutional Review Board. On September 6, 2011, the North Carolina State University Institutional Review Board granted approval for data collection: IRB #2197 (See Appendix A). Once approval was granted, the research project began and data collection began in October 2011 and continued through December 2011.

Bias Statement & Researcher Contextual Connection

Merriam (2009) reported, “the extent to which a person can bracket his or her biases and assumptions is open to debate” (p. 26). Before embarking on a study, it is common for a researcher to examine their biases and assumptions in relation to the phenomenon of interest (Merriam, 2009). Thus, a naturalistic researcher must trust in the confirmability of the findings (Erlandson et al., 1993). In this case, it is important to note that the researcher has intimate knowledge of the context under study. The researcher is employed by the North Carolina Department of Agriculture and works closely with the Commissioner of Agriculture as an intern. The researcher has witnessed the Commissioner’s interactions with other Department of Agriculture employees, agriculture commodity leaders, government officials, North Carolina residents, and lobbyists. Although the researcher has worked closely with the Commissioner of Agriculture in North Carolina, the researcher has not worked with other Commissioners in the United States. However, the researcher’s knowledge and experiences gained as an employee at the North Carolina Department of Agriculture most certainly informs the inductive reasoning and data analysis of the qualitative portion of this study.

Research Design

This study used a mixed methods approach to identify and define the leadership skills of Commissioners (Fraenkel & Wallen, 1996). According to Merriam (2009), “though qualitative researchers can never capture an objective ‘truth’ or ‘reality,’ there are a number of strategies that you as a qualitative researcher can use to increase the ‘credibility’ of your findings” (p. 215). Triangulation is one well-known strategy used to, “shore up the internal validity of a study” (Merriam, 2009, p. 215). Triangulation means looking at the research question from multiple data sources to allow for greater accuracy (Jick, 1979). Jick (1979) reported triangulation as mixing qualitative and quantitative methods, and that both methods should be viewed as complementary. The four basic types of triangulation include multiple data sources, methods, investigators and theories (Denzin, 1978).

This study used a holistic triangulation approach to accomplish the specific research objectives. In holistic triangulation, multiple measures are used to “uncover some unique variance which otherwise may have been neglected by single methods” (Jick, 1979, p. 603). Qualitative methods play an important role in this study by “illuminating” elements of the context, and “eliciting data and suggesting conclusions to which other methods would be blind” (Jick, 1979, p. 603). To accomplish this, the researcher conducted semi-structured interviews to further interpret the quantitative results. Holistic triangulation enhances understanding by “allowing for new or deeper dimensions to emerge in the research” (Jick, 1979, p. 603). This study used the holistic triangulation approach by gathering qualitative data to validate the quantitative results and make richer meaning (Sieber, 1973).

In order to address each objective, Jones' (2006) leadership skills instrument, adapted from Moore's (2003) instrument, was first given to each Commissioner. The leadership skills instrument measured self-perceived level of importance of individual leadership skills and the self-perceived proficiency of each individual leadership skill. To complement these data, phone interviews with Commissioners were conducted by the researcher to further address objectives 1, 2, and 3 (Jick, 1979).

Independent variables in this study were age, gender, ethnicity, highest educational degree, type of degree, tenure in profession, and tenure in leadership position(s). Gender, ethnicity, and highest educational degree classifications were nominal independent variables. Each participant was classified as having either an agriculture degree, science degree (including life sciences and engineering), or a humanities/social science degree. Age, tenure in profession, and tenure in leadership position(s) were continuous independent variables.

Population

The population for this study included Commissioners of Agriculture at State Departments of Agriculture. The 50 United States Commissioners were identified by using the National Association of State Departments of Agriculture (NASDA) 2011 directory.

Methodology

Participant Selection.

The Commissioners of Agriculture in this study represented all 50 United States' Departments of Agriculture, and represented both elected and appointed positions. The Commissioners were identified by accessing the National Association of State Departments of Agriculture (NASDA) Members 2011 directory, which identified 50 individuals serving in

this leadership position. Thus, census sampling was utilized and each of the 50 Commissioners was given the survey instrument electronically (Krejcie & Morgan, 1970). Thirty-five Commissioners responded to the research for a response rate of 70%. By utilizing census sampling, the researcher maximized participation in the study. Non-response error was controlled by comparing data from early and late respondents (Miller & Smith, 1983). T-tests examined differences between early and late respondents. Early respondents are those who responded in the first two and a half weeks, while late respondents are those who responded after this time period until the six week mark. The researcher found there were no differences in the mean scores for the two groups.

Merriam (2009) tells us that probability sampling allows researchers to generalize results, which is not the goal of qualitative research even when used in mixed methods. Non-probabilistic or purposive sampling is based on the assumption that the researcher wants to discover, understand, and gain insight about a particular sample (Merriam, 2009). Purposive sampling was used as part of the qualitative triangulation in this study because the investigator had to select a sample from which the most could be learned. In this case, the context being studied is current Commissioners of Agriculture. The intention was to seek out individuals because of certain qualities including: a) representing one of the 50 United States b) were currently serving as a Commissioner of Agriculture, c) were willing to share their experiences as a Commissioner of Agriculture, and d) were geographically distributed.

Qualitative research does not have a recommended, concrete sample size, and usually focuses on small, information-rich samples (Patton, 1990). Peer review is used to determine the adequacy of sampling size (Patton, 1990). In this research study, phone interviews were

conducted with the Commissioners until data saturation occurred. Data saturation occurred when the researcher gathered data to the “point of diminishing returns,” meaning new data was not being added (Bowen, 2008). Thus, the qualitative portion of the study focused on 15 individuals currently serving as Commissioners. One of the Commissioners was female identified and 14 were male identified. In terms of ethnicity, every Commissioner was white. Commissioners interviewed were also geographically distributed.

Instrumentation.

A leadership skills questionnaire was used to gather demographic data and to measure the importance of leadership skills each Commissioner perceives as important for the success of his or her position. This leadership skills questionnaire also measured each Commissioner’s self-perceived proficiency in that particular leadership skill area. Jones (2006) leadership skills instrument was used in this study, which was originally adopted from Moore’s (2003) leadership study involving administrative heads of agriculture who were employed by member universities of the National Association of State Universities and Land-Grant Colleges (NASULGC). The leadership skills questionnaire was modified slightly by changing references to the university to the Department. In Moore’s (2003) study, the leadership instrument was developed from content analysis of interviews with administrative heads in agriculture on what specific leadership skills they believed were needed to be successful in their position.

The leadership skills instrument (see Appendix C) was divided into six leadership categories and included demographic information questions. These categories called leadership skill areas included human skills, conceptual skills, technical skills,

communication skills, emotional intelligence skills and industry knowledge skills. These categories were developed after reviewing the relevant literature on leadership skills and competencies. Each leadership skill area had seven questions with the exception of the emotional intelligence area, which had eight questions. The leadership skills questionnaire had a total of 44 response questions and 7 demographic questions.

This instrument was designed to measure how important agriculture leaders believe each skill to be in his or her overall success in performing his or her job as Commissioner of Agriculture. To measure the perceived importance of each leadership skill, each Commissioner was asked to rate the leadership skill on a Likert scale ranging from 1 (Not Important) to 5 (Very Important). The instrument also measured his or her self-perceived level of leadership ability (proficiency) in each of these leadership skill areas. Participants were asked to measure their self-perceived proficiency in each of the six leadership skill areas. The Commissioner's responses were recorded on a Likert scale ranging from 1 (Not Proficient) to 5 (Very Proficient).

According to Jones (2006), the reliability of the leadership skills instrument (importance) was ($\alpha=.87$), and the reliability for the leadership skills instrument (proficiency) was ($\alpha=.89$). The specific instrument used to gather the data can be found in the Appendix D on page 111.

The semi-structured, phone interview method was employed to obtain qualitative information from participants to further explore, and make meaning of the importance of leadership skills each Commissioner perceives as important for the success of his or her position, and to further explore the demographic characteristics of the Commissioners. The

protocol established for the interviews consisted of ten open-ended questions about leadership experiences and five demographic questions administered consistently across the interviews by the researcher.

Data Collection.

In order to accomplish the research objectives, the researcher followed Dillman's (2000) Internet and Interactive Voice Response Surveys Design Methodology to enhance participants' response rate. The first step was to send a brief e-mail of introduction to Commissioners notifying them of the electronic questionnaire and encouraging their participation in the study (see Appendix B). The researcher included a link to the questionnaire containing directions for completing the study, the informed consent notice and the leadership skills questionnaire. The leadership skills questionnaire was open for a 6-week period and was linked to the North Carolina State University Qualtrics System. Data collection of the leadership skills instrument was analyzed using the North Carolina State University Qualtrics System.

One week after the initial e-mailing, a reminder e-mail was sent from the Commissioner of Agriculture in North Carolina to all participants of the study (see Appendix B). After week one, reminder e-mails were then sent from the researcher each week until six weeks after the initial e-mail was sent requesting their participation in the study.

Phone interviews were then conducted with the participants over a three-month period during the fall of 2011. Interviews lasted between one-half and one hour. Each interview was tape-recorded and transcribed in its entirety following the interview. The

transcripts and audio-tapes were reviewed by the researcher once to get a general sense of all of the data (Creswell, 1998) and again to be analyzed for content and coded (Merriam, 2009).

Data Analysis.

Perceived leadership skill importance and self-perceived proficiency in each of the leadership skill areas were analyzed through descriptive statistics by using the North Carolina State University Qualtrics System.

The raw scores were calculated for the perceived importance of each of the six skill areas by summing the responses within each area. The human skills, conceptual skills, technical skills, communication skills, and industry knowledge skills areas each had a total of seven questions for a total possible range of scores from 7 to 35 in each skill area. The emotional intelligence skills area had eight questions for a possible range of scores from 8 to 40. The raw scores were also calculated for the self-perceived proficiency of each of the six skill areas by summing the responses within each skill area.

The raw scores for both self-perceived proficiency and importance of each of the six skills areas were then converted to a 100-point scale by dividing the sum of the responses by the total possible response score for each skill area. These scores were converted to a 100-point score for calculation ease with evaluation and interpretation. Gaps were then determined by subtracting the self-perceived total from the importance total for each leadership skills.

The transcripts and audio-tapes were reviewed by the researcher to be analyzed for content and coded (Creswell, 1998). Data for this study were analyzed by using traditional methods of constant comparative analysis, described by Glaser and Strauss (1967) for use in

naturalistic inquiry. Glaser and Strauss' (1967) methodology begins with the unitization of data, categorization of units, merging categories, and journaling.

Researchers began with open coding, "coding the data for major categories of information," called the core phenomenon (Creswell et al., 2007, p. 249). After open-coding the researcher used axial coding to build a model around the core phenomenon (Creswell et al., 2007). According to Creswell et al. (2007), this model consists of

"causal conditions (what factors caused the core phenomenon, strategies (actions taken in response to the core phenomenon), contextual and intervening conditions (broad and specific situational factors that influence the strategies), and consequences (outcomes from using the strategies)" (p.249-50).

At the final step of coding, selective coding, the story was identified by the researchers that described the interrelationship of the categories in the model, which marks the occurrence of true triangulation (Creswell et al., 2007). The story which has emerged from the qualitative data in this study echoes the quantitative data, with exceptions, because of other emergent data. Codes were considered trustworthy when saturation of the data occurred, and codes appearing in only one transcript were removed. Data saturation occurred when new participants were brought continually into the study and the data set was completed, which was indicated by data replication or redundancy (Bowen, 2008).

Trustworthiness Criteria.

The interviewer and the interviewees both impact the process of data collection and analysis due to the qualitative nature of the study. Triangulation was used as a strategy to ensure validity and reliability (Merriam, 2009). Credibility of the research was also established through peer debriefing and member checking. Peer debriefing occurred five

times throughout the data collection and analysis process. As another check of credibility, member checking was done with each interviewee (Merriam, 2009). An audit trail and journaling were used to establish dependability and confirmability. Transferability was established through a purposive sample and thick description (Merriam, 2009).

Each phone interview was coded to retain confidentiality. The codes are included in parentheses in the results section after a quotation is given by an interviewee. The codes are part of the audit trail and provide trustworthiness confirmability (Merriam, 2009).

Summary

This chapter discussed the use of a mixed methods approach to assess leadership skills of Commissioners of Agriculture. The population for this study included Commissioners of Agriculture denoted in the directory of the National Association of State Departments of Agriculture.

The quantitative portion of the study included a description of Commissioners of Agriculture and their perceived level of importance of specific leadership skills. Self-perceived proficiency of leadership skills was described as well. The instrument used was a questionnaire, which collected information regarding the perceived importance of leadership skills needed by Commissioners of Agriculture to successfully perform their job. This instrument also measured the academic program leaders' self-perceived proficiency in the leadership skill area. Demographic information was also collected.

The qualitative portion of the study was used to compliment the quantitative portion of the study and to further gather demographic information about the participants of the

study. Phone interviews were conducted with the participants to further explore the six leadership skill areas, while continuing the search for meaning.

The process of analyzing the data of this study was also discussed in this chapter. Descriptive statistics were used to analyze the data collected by the instrument. The traditional method of constant comparative analysis was used for the qualitative portion of the study. The methodology consisted of the unitization of data, categorization of units, merging categories, and journaling.

CHAPTER IV: RESULTS

Introduction

Results are presented by objective and then leadership skill area: human skills, conceptual skills, technical skills, communication skills, emotional intelligence skills, and industry knowledge skills. The quantitative data is presented first followed by appropriate triangulation and corroborating qualitative data. The codes from the audit trail provide for confirmability and correspond to the interviewee who made the statement, as well as the corresponding page number of the transcription.

Objective 1

Determine selected demographic characteristics of Commissioners

Demographics

The National Association of State Departments of Agriculture indicates 50 individuals in each state serving as Commissioners. Of the 35 Commissioners who participated in the leadership skills questionnaire, 100% were male. In terms of ethnicity, this study found 91.4% ($n=32$) were white; 5.7% ($n=2$) were Asian, and 2.9% were African American ($n=1$). The oldest participant in the study was 85, and the youngest was 34 years old. The mean age of the participants was 56.03 years old.

Commissioners were asked by the researcher during the phone interviews to describe where they grew up. The majority of the Commissioners grew up on a farm or lived on a farm during their lifetime (I1, I2, I3, I4, I5, I6, I7, I8, I9, I10, I12, I13, I14, I15).

I came right off the farm, no political experience what so ever (I2.M.1).

I've lived on a farm, I'm the fifth generation and all I ever wanted to do was farm. When I got out of high school I went straight to the farm (I4.M.2). I've been interested in policy and government and politics for a long time, but I really come from straight off the farm (I6.M.1).

I grew up on a farm out in Western [State] and went to school and taught for several years. I came back to the farm when my dad's health failed and farmed in this part of the state for 25 years (I14.M.1).

Tenure at Department of Agriculture and as Commissioner

The mean number of years the participants had been employed by the Department of Agriculture was 7.41 years. The most years by a participant was 50, and the participant with the fewest years was 0.58 years (data was converted from months to years). The fewest years a participant had in the position as Commissioner was 0.33 years while the most was 43. The mean for the number of years serving in the Commissioner position was 4.35 years. Age and tenure are presented in Table 2.

Table 2

Age and Tenure of Commissioners

	N	μ	σ	Min	Max
Age	35	56.03	12.44	34	85
Tenure in Department of Agriculture	35	7.41	10.99	0.58	50
Tenure in Commissioner Position	35	4.35	7.19	0.33	43

Educational Degree Held

Participants of the study were asked to list their highest level of degree earned. The largest number of respondents reported their highest degree earned as a bachelor's degree (94.3%, $n=33$). A total of 11 respondents had earned graduate degrees; 14.3% ($n=5$) held a

master's degree in an agriculture related field, 8.6% ($n=3$) held a master's degree in a humanities/social science field, 2 respondents held a doctor of philosophy degree (one in political science and one in agriculture), and 2.9% ($n=1$) held a doctor of veterinary medicine degree.

The majority of Commissioners completed an undergraduate degree (94.3%, $n=33$). The academic major of each respondent's undergraduate degree was classified as either an agriculture degree, science degree (including life sciences and engineering), or a humanities/social science degree. This study found 62.9% ($n= 22$) of the respondents received an undergraduate degree in an agriculture field; degrees ranged from animal science, general agriculture, plant science, animal husbandry, to agricultural education. This study also found 17.1% ($n=6$) of the respondents held a science degree, which included life sciences and engineering; degrees ranged from engineering technology, biology, to marine biology. Of the respondents, 8.6% ($n=3$) held a humanities/social science degree; degrees ranged from philosophy to political science.

This study found 22.9% ($n=8$) of the respondents held an undergraduate degree in agriculture economics/business, ranking as the top degree held by Commissioners, and 17.1% ($n=6$) of the respondents held an undergraduate degree in animal science/husbandry, ranking as the second highest degree held by Commissioners. The third highest degree held by Commissioners was in general agriculture, and 14.3% ($n=5$) of the respondents held an undergraduate degree in this field.

Other Commissioners held degrees below the undergraduate level; 2.9% ($n=1$) held an associate's degree and 2.9% ($n=1$) completed high school.

Title of Position

The leader of a state's Department of Agriculture varies among the 50 United States. Of the 35 participants, 45.7% ($n=16$) held a title of Commissioner, 28.6% ($n=10$) held a title of Director, 22.9% ($n=8$) held a title of Secretary, and 2.9% ($n=1$) held a title of Chairperson.

Leadership Roles in Agriculture Organizations

Before being appointed or elected to serve as Commissioner, the Commissioners were able to identify a significant leadership position they held within an agriculture organization. The majority of Commissioners held a leadership role within their state or at the national level in an agriculture organization, or at the Department (I1, I2, I3, I4, I6, I7, I8, I9, I10, I12, I13, I14, I15).

I was involved with a number of organizations where I rose to the presidency, like the Hereford Association, and just a number of activities. Most recently I served as the Board of Directors for the [state] Corn Growers. I was on their national policy action teams. I just came off after serving 10 years on our county's zoning board, where I was the chairman for three years (I2.M.3).

I had 37 years at the [state] Farm Bureau, which is an advocacy and policy organization for farmers in this state. The last 15 years I was the administrator and I did lobbying prior to that for the organization in the legislator and in Congress on policy positions (I3.M.1).

I've been here at the Department now for 5 years, I started as Deputy and prior to that I was President of [state] Farm Bureau. I learned most of my leadership skills at the Farm Bureau organization working through the Young Farmer program and being county and state president (I4.M.1).

I was vice chairman for the national beef check off for the check off division for the National Cattlemen's Beef Association. I had served on the [state] beef council for about seven years where I was chairman for about two years and treasurer for about four years after that. I had served on the Farm Bureau's young farmer and rancher committee, was a leader there, and then county officer at the state convention for multiple years as well (I7.M.1).

I was the executive for the [state] Forestry Association, which is the largest industry in [state] (I9.M.1).

I was active in farm grown cooperatives for seven and a half years and then I was president of the [state] wine grape growers for two and a half years. During that time I was appointed by the governor and then re-appointed to the state board of agriculture. I was then selected by USDA Secretary to be his chief of staff (I12.F.1).

I served as the interim President of the [state] Farm Union. I did that and expected to stay for a few months during their transition to a new President; however, I stayed instead for 11 years as the President of the organization. Then I went to the national Farmers Union and served as the president for two terms, then retired (I14.M.1).

These organizations served as motivation for the Commissioner to serve or run for the position.

It was the encouragement of the Department staff and my contacts across the state in the agriculture and renewable resource industry that I was encouraged to seek the office. And of course, the record indicates I was successful (I1.M.1).

The leadership in the Farm Bureau and various folks that I've worked with encouraged me to be Commissioner. They were nervous about who might get the position. They wanted somebody with more confidence and to settle the agriculture community (I3.M.2).

The Farm Bureau and [state] Cattlemen's Association were probably the two main organizations that provided encouragement (I7.M.1).

Those who encouraged me to become Commissioner include a wide range of business leaders, my board from the [state] Agribusiness Council, and the list goes on and on (I13.M.1).

Leadership Roles in Other Organizations during School and Adulthood

During high school and college, some of the Commissioners also held leadership roles in other groups outside of the agriculture arena (I5, I9, I11, I15).

I did things in high school and college that prepared me to be in leadership positions. I was everything from the chair of the National Honor Society and captain of team sports (Agriculture I5.M.1).

I was actually the first president of the student body when we started my high school working to get accredited. Back then the biggest challenge was to provide leadership and getting folks to wear belts with the Levis (I9.M.2).

I was involved with football and basketball. In college, I was in a fraternity and I had some leadership roles in that firm (I11.M.3).

In college I was involved in some student senate activities, but nothing that was directly related to agriculture (I15.M.2).

During adulthood, some of the Commissioners held leadership roles in other groups outside of the agriculture arena (I3, I8).

I've been involved in Boy Scouts; I'm council president right now of one of the largest councils in the country, which has been a good training base coming up through the ranks to eventually be the council president (I3.M.3).

I had a chance to serve on my county's planning commission (I8.M.1).

Not only did Commissioners serve in leadership roles outside of the agriculture field during adulthood, some Commissioners held leadership roles within the government (I5, I8, I9, I11, I14, I15).

In 2005 I was elected and served in the state House for five years and so that probably more than anything really helped me in this job because so much of what I do is political and working with legislators (I8.M.1).

I had been Commissioner of the Conservation of Natural Resources in [state], which was a cabinet position but the agency is about three times as large as agricultural industries. I had also been in the state legislature... So I've got a good bit of knowledge about the state government in general and natural resources in particular (I9.M.1).

I served a couple of terms in the state Senate representing a rural district out in my home area (I14.M.1).

I was in the legislature and had become Speaker of the House (I15.M.1).

Objective 2
Assess Level of Perceived Importance of Leadership Skills, as Determined by Commissioners

Perceived Importance of Leadership Skill Areas

Before collecting data for this study, six major leadership skill areas were deemed important through a review of the literature. These leadership skill areas included: human skills, conceptual skills, technical skills, communication skills, emotional intelligence skills, and industry knowledge skills (Jones, 2006; Moore & Rudd, 2004). Participants rated individual item responses in each leadership skill area from 1 (*Not Important*) to 5 (*Very Important*). In order to make meaning of this quantitative data, triangulation was used by the researcher.

Human Skills

In the human skills area, there were a total of seven questions. Each participant was asked to respond to how important they believed each leadership question was to being a leader. The response mean score, along with the standard deviation for each human skill importance item response, is listed in Table 3. The participant's responses indicate they believe human leadership skills to be in the *Important to Very Important* category of leadership skills. The majority of participants rated respecting others and creating an environment in which you, as the leader, are approachable and open to new ideas as the most important of the human skills. It is interesting to note that throughout the entire instrument, Commissioners rated respecting others as the most important skill in all of the leadership

skill areas. Commissioners believe creating an environment that values the diversity of others is the least important of the human skills.

Table 3

Human Skill Importance Item Response Scores

	μ	σ
Respect others	4.72	0.51
Create an environment in which you, as the leader are approachable and open to new ideas	4.69	0.47
Create an environment in which team members are willing to share ideas	4.58	0.50
Be an effective team member	4.53	0.61
Evaluate the impact of personnel	4.47	0.56
Identify personal strengths and weaknesses	4.36	0.59
Environment that values the diversity of others	4.22	0.93

Note: Scores measured using Likert scale; 1 (Not Important) to 5 (Very Important); $n=35$.

Commissioners validated the quantitative results during the interview process by discussing the importance of diversity, creating an open and approachable atmosphere, and the impact of personnel.

Diversity.

Commissioners recognize that being accepting of diversity is important both in and out of the Department. Commissioners interact with various people and organizations daily, and feel it is important to be able to accept this great diversity. Dealing with diversity is part of their job as either an appointed or elected official.

Diversity is key. A friend of mine has a great saying, if everyone thought the same way that I do, you'd all be trying to date my wife. Diversity is good; we need to promote discussion and that diversity (I2.M.6).

The challenging side of a job is dealing with diversity; you can't keep up with everything so you have to know what you need to staff. Sometimes some very difficult people come up to visit you and you have to deal with them too. If you listen to these people and return their calls, that goes a long way and allows them to appreciate the fact that they had your ear for a while (I11.M.3).

Open and Approachable Atmosphere.

Commissioners understand that cultivating an open environment is important both in and out of the Department. Commissioners believe in having an open-door policy with their employees at the Department. They also believe in being accessible to people and organizations outside of the Department.

Employees appreciate the opportunity to give feedback (I11.M.5).

I feel it is important to be accessible (I11.M.4).

Trying to go out to our different divisions to say hello to people and to learn about what they are doing as often as I can is important (I12.F.2).

I just like popping in people's offices to see what's happening. I think the technical term is managing by walking around, and I really believe that is important (I13.M.5).

Impact of Personnel.

Commissioners recognize the importance and value the personnel at their respective Department. The personnel aid the Commissioner in the daily operations of the Department and provide expertise in the many agriculture fields the Department oversees. Without the personnel, the Commissioners believe they would not be successful.

The work of state employees is a noble profession because you are actually being a public servant, serving the interest of the public (I5.M.2).

As far as helping to guide the directions of agriculture in your state it's much easier when you have some great people to work with... What's nice is when you have great people to work with it's much easier to work on each other's strengths and be an effective team to impact agriculture (I6.M.1).

You do not have to be an expert in everything but you have to have the right people around (I8.M.7).

Conceptual Skills

In the conceptual skills area, there were a total of seven questions. Each participant was asked to respond to how important they believed each leadership question was to being a leader. The response mean score, along with the standard deviation for each conceptual skill importance item response, is listed in Table 4. The participant’s responses indicate they believe conceptual leadership skills to be in the *Important to Very Important* category of leadership skills. Responses in the conceptual skill area were higher compared to all of the other leadership skill areas. Commissioners believe that thinking strategically is the most important of the conceptual skills, while an attitude that supports and welcomes organizational change and helping others support organizational change are the least important of the conceptual skills.

Table 4

Conceptual Skill Importance Item Response Scores

	μ	σ
Think strategically	4.68	0.53
Create a long term vision for the organization	4.62	0.55
Be decisive	4.62	0.49
Set goals	4.56	0.56
Achieve goals	4.54	0.56
Attitude that supports and that welcomes organizational change	4.27	0.69
Help others support organizational change	4.27	0.61

Note: Scores measured using Likert scale; 1 (Not Important) to 5 (Very Important); $n=35$.

Commissioners validated the quantitative results during the interview process by discussing the importance of creating a vision for the Department, and setting and achieving goals. Commissioners elaborated about the importance of their decision-making process, which emerged as a new finding in the conceptual skill area.

Vision.

Commissioners believe in the importance of sharing a vision with their personnel. Having a vision for the Department and the agriculture industry allows each employee to understand their role within the Department. Commissioners believe it is important to be the person who provides that vision to their employees.

I think it's important to inspire people with a shared vision, one that they can be excited about and they understand what their role is in that vision (I12.F.4).

Leadership is about the importance of having a vision and direction. Leadership is about having principles and fundamental respect for others and understanding that you're in a role of public service, but that doesn't mean that you forsake a sense of direction or purpose (I5.M.5).

When you are in the primary leadership role your job is to just keep the group organized and to make sure that everyone else is involved and to keep the focus for the group (I3.M.3).

Setting and Achieving Goals.

Commissioners identified that setting goals is important for the Department. Goals allow the Department and the employees to see what needs to be accomplished.

Commissioners acknowledged that reevaluating goals is also important.

You certainly have to have a goal, it's like a map. If you want to go somewhere you have to know how to get there. If you don't have a goal then you don't know where you're going (I4.M.6).

How you go about setting goals is by getting lots of input from people and having discussions about how to figure out what we should and should not do (I6.M.6).

It is important to know where you are going because if do not, you are going to just go along; you really need to set goals (I8.M.6).

You should work with people to set goals that they buy in to. They might feel that the goals are a stretch but they need to feel that the goals are attainable and they see, because of their buy in, a path way towards achieving those goals (I12.F.4).

With goal setting and leadership, you have to spend a lot of time circling back and making sure that people are comfortable as they can be with where you're going, why you're going there, and what it's going to look like when it's done (I15.M.6).

Decision Making.

Commissioners identified that before making a decision it is important to understand both sides of issue. Including others in the decision making process is also important.

Understanding why you made a wrong or right decision in the past is excellent practice for making decisions in the future.

Making sure that you get both the pros and cons is first important. Then you need to think about the issue yourself and then put a group together that talks through it. You make a group decision that everyone has bought into... Stay flexible; make sure you have all the input necessary before you lock down. (I3.M.5).

In most cases not everyone is going to be happy all the time. You need to listen to both sides of the story and work through their individual issues, and then you can come to a consensus and come to some final resolution (I4.M.1).

The best practice for making decisions is making decisions. I think as you live life, you make thousands of decisions a day. It's those tough ones that give you practice for the next tough decision. Sometimes you make the wrong decision and those are huge learning experiences, while sometimes you make the right decision (I6.M.5).

I think any time you have to make a decision, big or small, it's really a process of evaluating the options or what possibilities there are. Kind of scoring them to see what the pro's and the con's of the decision are and then make the decision will result in the most of the best for the group organization or whoever it's going to impact (I7.M.5).

Workgroups are a great way to get to a richer decision because they bring perspectives to the table and hopefully the decision will have a long lasting effect (I12.F.3).

Technical Skills

The technical skills area had seven questions. Each participant was asked to respond to how important they believed each leadership question was to being a leader. The response mean score, along with the standard deviation for each question, is listed in Table 5. The participants of this study varied in their perception of importance of the technical skills area. Scores ranged from 3.60 to 4.25; thus, this leadership skill area had the largest variance in responses. The participant's responses indicate they believe technical skills to be in the *Somewhat Important to Important* category of leadership skills Commissioners rated interpreting and explaining organizational budgets as the most important of the technical skills, while they believed effectively integrating computer software programs were the least important. It is interesting to note that throughout the entire instrument, Commissioners rated being able to effectively integrate computer software programs as the least important skill in all of the leadership skill areas.

Table 5

Technical Skill Importance Item Response Scores

	μ	σ
Interpret and explain organizational budgets	4.25	0.65
Develop budgets for all levels within the organization	4.17	0.70
Effectively use computer software for word processing	4.08	0.76
Effectively use and search the internet	3.95	0.78
Effectively use computer software for spreadsheets	3.84	0.90
Effectively use computer software for databases	3.78	0.92
Effectively integrate computer software programs (i.e. merge files)	3.60	0.98

Note: Scores measured using Likert scale; 1 (Not Important) to 5 (Very Important); $n=35$.

Commissioners validated the quantitative results during the interview process by discussing the importance of budgeting. Commissioners did not discuss the importance of using technical skills such as, searching the internet and using computer software for various tasks. However, Commissioners elaborated about the importance of understanding and dealing with the changing policies in state government, which emerged as a new finding in the technical skill area.

Budgeting.

Commissioners identified that being able to interpret and explain the Department’s budget is important. They emphasized that it is important to prioritize the Department’s programs during budget cuts. They also believe involving others in and out of the Department for input when dealing with budget cuts is important and shows the transparency of the Department.

You have to set priorities first and protect those from cutbacks. Of course that means you have got to cut more in other places; you have to prioritize the

things that are less important, but generally, at the same time see what the dollar impact is (I9.M.4).

It is important to involve industry leaders to go through the Department's budget line by line and be very transparent and very open to answering all of the questions that they might have (I12.F.1).

You have to make a determination of which resources you give up and give back to the general state fund and which ones you redeem (I15.M.5).

Policies in State Government.

The importance of understanding and dealing with the changing policies in state government emerged as a new finding in the technical skill area. Commissioners recognize that creating and changing policies in state government is a major challenge. Often they do not have a direct say in these policies due to state government practices, which can be frustrating. They also understand that it is important to help their constituent base understand the new or changing policies.

Change is tough in government but important; there is a system of protections that go in to protect employees and to move employees around is a tough thing to do (I3.M.6).

The Department should help folks navigate their way through what can sometimes be a confusing place when you talk about permits and regulatory frameworks that you have to work through (I6.M.5).

We have so many things that are not in our statutory authority and the things that impact farmers the most now days are not here. It would be ideal and important to have a more direct say in those issues that impact the farmer's ability to farm in [state] (I12.F.4).

Communication Skills

The communication skills area had seven questions. Each participant was asked to respond to how important they believed each leadership question was to being a leader. The

response mean score, along with the standard deviation for each question, is listed in Table 6. The Commissioners involved in this study showed variance in their answers, with responses ranging from 3.86 to 4.54. The participant's responses indicate they believe communication skills to be in the *Somewhat Important* to *Important* category of leadership skills. Commissioners rated that interacting and communicating with people who have divergent points of view is the most important of the communication skills. It is interesting to note that Commissioners rated writing for various audiences as having the least importance in the communication skill area.

Table 6

Communication Skill Importance Item Response Scores

	μ	σ
Interact and communicate with people who have divergent points of view	4.54	0.51
Read and comprehend a wide range of publications	4.32	0.58
Identify barriers to listening	4.19	0.57
Reduce barriers to listening	4.16	0.60
Recognize and effectively use nonverbal cues or behaviors	4.16	0.60
Write for various organizational purposes (i.e. technical writing, professional publications, etc.)	3.92	0.65
Write for various audiences	3.86	0.75

Note: Scores measured using Likert scale; 1 (Not Important) to 5 (Very Important); $n=35$.

Commissioners validated the quantitative results during the interview process by discussing the importance of listening and speaking skills, collaborating with people who have different views, and recognizing the types of communication to use in a particular setting. Commissioners did not discuss the importance of writing skills. However,

Commissioners elaborated about the importance of electronic communication, which emerged as a new finding in the communication skill area.

Listening.

Commissioners believe that listening is often more important than talking to people. It is important for Commissioners to listen to their constituent base. It is also imperative that Commissioners find a way for the constituent base to listen to the Commissioner, who serves as the voice of the Department.

The most underrated communication skill that most people overlook is the skill of listening. I find that listening and hearing what people have to say is often times one of the most important things you can do (I5.M.4).

Listening is one of the most important skills, it's always very important to listen, and then try to figure out resolution (I4.M.1).

You have to find ways to communicate from your personnel to the public and find a way for them to listen (I6.M.4).

It's more important for me to listen and interact... It's more important for me to hear what they have to say as it is important for them to hear what I have to say (I8.M.5).

Speaking Skills.

Commissioners serve as the voice of the Department and the agriculture industry. Thus, Commissioners believe that clear, verbal communication is important in order for their constituent base to understand a particular subject matter at hand. Commissioners also emphasize the need to interact with others instead of just talking at them.

You have to speak clearly and articulate your reasoning, and people will respect where you are coming from (I11.M.4).

You have to be able to articulate your rationale for why you are doing what you are doing and that is very important (I15.M.5).

Collaborating with People Who have Different Views.

Commissioners recognize the importance of communicating and working with people who have different viewpoints. Commissioners believe it is important to understand both sides of a situation. Avoiding conflict between different groups is essential when analyzing problems.

It's all about people and understanding how to communicate ideas and directions. Communication is a two-way street and you have to be on both sides (16.M.4).

That's the biggest part of the Secretary's job, dealing with people. You have to have this ability because you meet all different types and personalities, and because of their positions you have to work with them on different issues. It is very important that you're able to develop relationships and work together (14.M.2).

You should try to bring people with differences to the table and then collaborate to find constructive ways to solve problems (15.M.5).

Recognizing the types of communication to use in a particular setting.

Commissioners recognize that they might think a certain method of communication is most effective; however, communication methods should be altered depending on the situation. Commissioners utilize a particular communication method based upon their audience.

My communication skills have changed, and they change from situation to situation. If you see you aren't succeeding in one direction you go in a different one (11.M.4).

The most effective way to communicate will depend on the audience. Everybody turns to different channels of communication for different things (16.M.4).

In each case that comes up, you must approach the situation differently and determine how you want reach that group (115.M.5).

Electronic Communication.

Commissioners recognize the need to communicate using electronics. It is important to stay current with electronic communication. By understanding the new methods of electronic communication, Commissioners and the Department are able to reach and engage people. The majority of Commissioners emphasized the importance that their Departments must utilize social media such as Facebook and Twitter.

You have to adapt and move along with what types of technology advances there are when it comes to a change in communication style (I6.M.4).

It is important to stay current with the technology that has been changing our communication so rapidly (I1.M.1).

My ideal Department of Agriculture would help empower people to be their best and we would do that through communication methods, through training and through education. We would do that with electronics, technology like Skype, email, text, internet, Facebook and Twitter (I6.M.6).

It's really important to engage people in a conversation and that's one of the advantages of being able to use electronic communication; something like a blog or Twitter, there is an opportunity to start a conversation even though it might be online (I12.F.3).

Emotional Intelligence Skills

The emotional intelligence skills area had eight questions. Each participant was asked to respond to how important they believed each leadership question was to being a leader. The response mean score, along with the standard deviation for each question, is listed in Table 7. The emotional skills area was rated *Important to Very Important* by the Commissioners involved in this study. Commissioners rated having a high level of motivation as the most important emotional intelligence skill, while the least important was separating personalities from behaviors.

Table 7

Emotional Intelligence Skill Importance Item Response Scores

	μ	σ
High level of motivation	4.54	0.51
Control emotions in emotional situations	4.49	0.56
Resolve conflict	4.43	0.56
Make use of constructive criticism without becoming critical and angry	4.40	0.50
Set priorities to effectively manage personal time	4.37	0.55
Set priorities to effectively manage organizational time	4.37	0.49
Respect for the time commitments of others	4.38	0.55
Negotiate agreement	4.23	0.69
Separate personalities from behaviors	4.09	0.74

Note: Scores measured using Likert scale; 1 (Not Important) to 5 (Very Important); $n=35$.

Commissioners validated the quantitative results during the interview process by discussing the importance of respecting the time commitments of others. Commissioners did not discuss the importance of the other emotional intelligence skills.

Respect for Time Commitments of Others.

Commissioners noted the importance of respecting the time commitments of others. They recognize that you need to understand people have other obligations in their personal and professional lives. By respecting the time commitments of others, Commissioners create an understanding environment for their employees as well as those organizations and people outside of the Department.

You have to understand people have families, they have other interests

(I3.M.1).

Do not just tell me the same thing three times in different ways; it is not a productive use of my staff's time or my time (I10.M.2).

Industry Knowledge Skills

The industry knowledge skills area had seven questions. Each participant was asked to respond to how important they believed each leadership question was to being a leader. The response mean score, along with the standard deviation for each question, is listed in Table 8. The participant's responses indicate that industry knowledge skills are in the *Important* category of leadership skills. Scores in the industry knowledge skills area were not as high compared to other areas, but Commissioners still believe in their importance. It is important to note the Commissioners ranked explaining the political environment of the state and the implications for the Department as the most important of the industry knowledge skills, while evaluating the impact of programs for each client group and being able to explain the founding principles of the Departments were the least important.

Table 8

Industry Knowledge Skill Importance Item Response Scores

	μ	σ
Explain the political environment of the state and the implications for the Department	4.54	0.61
Identify the needs of various client groups within the state	4.43	0.61
Relationship between statewide programs	4.29	0.62
Create linkages within both traditional and non-traditional audiences	4.26	0.56
Depth of knowledge in a content area	4.20	0.63
Evaluate the impact of programs for each client group	4.14	0.65
Being able to explain the founding principles of the Department of Agriculture with constituents	4.14	0.85

Note: Scores measured using Likert scale; 1 (Not Important) to 5 (Very Important); $n=35$.

In order to make meaning of the quantitative data, triangulation was used by the researcher. Commissioners validated the quantitative results during the interview process by discussing the importance of understanding the role of the Department and the constituent base. Commissioners elaborated about the importance of understanding the role of the Department at a national/international level, which emerged as a new finding in the industry knowledge skill area.

Understanding the Role of the Department.

Commissioners elaborated on the importance of Department understanding their role, which is to help and protect others involved in agriculture and consumer services. Commissioners believe the Department should reach out to their constituent base to make them aware of the programs and opportunities available to them through the Department.

The Department must look for ways to incubate opportunities for farmers so consumers can take advantage of the abundance of agriculture (I10.M.1).

When farmers think of agriculture I want them to think of two things, our Department and Extension. Bottom line, we need to be serving the farmer (I11.M.6).

Understanding the Constituent Base.

Commissioners recognize the importance of focusing on their constituents in order to determine their issue and figure out ways to better serve them. Most of the Commissioners come from a farming background, which they believe helps them to better understand their constituents involved in the agriculture industry.

It is important focus externally to the citizens and the farmers in particular, and to position the Department to be as helpful and creative as possible (I10.M.1).

I do think that as we see fewer and fewer people of the total population directly involved in farming in particular, it becomes even more imperative for us to think about the broader base stakeholders (I12.F.5).

It's important to have some background and experience, as well as knowledge about how the agriculture industry works in the state, and how important it is for our stakeholders (I14.M.2).

Understanding the Importance of the Department at a National/International Level.

Commissioners identify that their Department does not only serve their respective state. The Department should be important at the national and international level in the agriculture industry and in consumer protection. Commissioners were able to identify that working with commodity groups is an excellent way to promote trade internationally.

It's important to position your state's agriculture industry as a credible source of safe and nutritious food products, both in and out of the state as well as internationally (I7.M.6).

Departments should have international trade consultants representing different regions. They would identify what each region really wants, and then link them to the Department to figure out what we can do to reach this goal (I15.M.6).

Perceived Leadership Skill Importance

Scores for each leadership skill area are presented in Table 9. Each construct was converted to a 100-point scale by dividing the sum of the responses by the total possible response score for each skill area. As shown in Table 9, the overall mean for the perceived importance of leadership skills was an 85.96, with a standard deviation of 4.95. In all areas of perceived importance of leadership skills Commissioners seem to indicate that they hold these six leadership skills as being important. The highest mean score was human skills

($\mu=90.20$, $\sigma=4.17$). The lowest score was technical skills ($\mu=79.06$, $\sigma=5.69$). Thus, Commissioners believe that technical skills are the least important, while human skills are the most important of the six leadership skill areas.

Table 9

Perceived Leadership Skill Importance

	μ	σ
Human Skills	90.20	4.17
Conceptual Skills	90.17	3.99
Emotional Intelligence Skills	87.33	5.15
Industry Knowledge Skills	85.71	6.47
Communication Skills	83.28	4.26
Technical Skills	79.06	5.69
Total Importance Scale	85.96	4.95

Note: The possible scores for perceived importance range from 20 to 100. Based on Jones' (2006) and Moore's (2003) studies, scores falling between 80 and 100 are *Important* and *Very Important*. Scores falling between 60 and 80 are *Somewhat Important*. Scores falling below 60 are of *Little Importance* to *Not Important*; $n=35$.

Objective 3
Assess Self-perceived Proficiency of Leadership Skills of Commissioners

Study participants were assessed their self-perceived proficiency within each leadership skill area construct. Participants rated individual item responses in each leadership skill area from 1 (*Not Proficient*) to 5 (*Very Proficient*). In order to make meaning of the quantitative data, triangulation was used by the researcher.

Human Skills

In the human skills area, there were a total of seven questions. Each participant was asked to respond to how proficient they believed they were in each leadership question. The

response mean score, along with the standard deviation for each human skill proficiency item response, is listed in Table 10. Commissioners believe their human skills are in the *Somewhat Proficient to Above Average Proficient* category of leadership skills. It is interesting to note that respecting others and creating an environment in which team members are willing to share ideas scored the highest in this area, while evaluating impact of personnel scored the lowest.

Table 10

Human Skill Self-perceived Proficiency Item Response Scores

	μ	σ
Respect others	4.50	0.65
Create an environment in which team members are willing to share ideas	4.39	0.60
Create an environment in which you, as the leader are approachable and open to new ideas	4.33	0.59
Be an effective team member	4.14	0.59
Environment that values the diversity of others	4.09	0.70
Identify personal strengths and weaknesses	3.89	0.52
Evaluate the impact of personnel	3.78	0.64

Note: Scores measured using Likert scale; 1 (Not Proficient) to 5 (Very Proficient); $n=35$

Commissioners validated the quantitative results during the interview process by discussing their proficiency levels in valuing diversity, evaluating the impact of personnel, encouraging members of the Department to express themselves, and creating an open and approachable atmosphere. Commissioners elaborated on their proficiency in creating a family environment at the Department and in promoting leadership development, which emerged as new findings in the human skill area.

Diversity.

Commissioners appreciate the wide range of diversity in their respective state; they take diversity into account when working with others. Commissioners believe they are proficient at working with the diverse groups in their state and are able to work with these groups to accomplish various tasks.

I like the diversity of my job. In the course of the day I can deal with an 8,000 acre commercial dealer, the president of Purdue farms or his staff, and I can also deal with a 2 acre grower who is trying to get involved in a farmers market, and everything in between (I11.M.3).

There is such diversity out there in our state and everyone has their right to be heard (I2.M.6).

We have a wide range of people and interests...it's very diverse across the state (I12.F.2).

Impact of Personnel.

Commissioners show their appreciation for the personnel at their respective Department and desire for them to succeed. The personnel provide skills to the Department that often the Commissioner may not possess. Commissioners believe they are successful at working with their personnel and emphasize their need of a strong personnel base.

Commissioners pride themselves that their respective Department has the best staff.

I employ a number of college graduates because I have to bring people in that are knowledgeable and up-to-date in the industry. The great joy to me is bringing people into the Department and seeing them succeed (I1.M.2).

I'm very proud of the fact that I probably have the most skilled professional staff than any other Department (I1.M.4).

I have a great appreciation for the people in the Department; they are all really dedicated to public service and have been serving the public and doing their jobs for three years now without a pay raise (I2.M.2).

I surround myself with really smart people who take care of the expert stuff and I trust them and they educate me (I8.M.7).

I work with a lot of great people who know how to do their job well and do not require a lot of day to day supervision to do their basic duties (I7.M.2).

Encourage Members to Express Themselves.

Commissioners take the time to get to know their personnel at their respective Department. They provide a multitude of opportunities for their employees to contact them and express their concerns. Commissioners believe they are proficient at developing relationships with their personnel, which in turn encourages them to express themselves.

I like to be able to interact with employees as much as possible to let them know that I'm interested in what they do and that I value their service to the agency (I8.M.4)

One thing I have implemented is what I call the brown bag lunch program where once a month 13 or 14 employees are selected randomly and we have an hour and a half lunch time. They bring in lunch and we sit around the board room and just visit. I get to know them, what they do, their families, and we all share with each other. I also give them an opportunity to share issues or things they would like to see improved (I8.M.4).

I tell my staff always, if you come into my office and you think I have made a bad decision somewhere you tell me and let me know. If you don't stimulate my thinking then I can be off base with the decision that I made for that situation (I1.M.4).

I eat lunch with the folks in the cafeteria every day, so you have a chance to meet with the people who are working for the Department. It's important that they know the Commissioner is out and about and around and I give them an opportunity to share (I14.M.3).

Open and Approachable Environment.

Commissioners believe they have successfully created a Department that is open and approachable. Commissioners have an open policy and encourage personnel and state

residents to discuss their concerns and feelings. They believe they are accessible to people both in and out of the Department, which makes conducting business an easier process.

My door is very open here and I am not top-down motivated. It's important to me that we have an open-door policy and the employees are free to communicate back and forth (I14.M.3).

It's not unusual for me to do a walk-about, to stop in someone's work space and ask them what they are working on, if they have any suggestions and how their work is going (I15.M. 2).

The goals for me are to make sure the department is run as efficiently as possible and to make sure the public feels they have open access to the department and input into our department (I15.M.6).

I have an open-door policy to staff. When they are employed I visit with them and explain to them that the door to this office is open at any time (I1.M.2).

Family Environment.

The Commissioners identify that their respective Department provides them with social fulfillment. For instance, the Department hosts employee wide picnics and holiday parties. The Department becomes the Commissioner's family and they encourage this type of atmosphere to exist. The family atmosphere makes it easier for the employees to be happy on the job when hard times face the Department like budget cuts.

We try to also keep different social activities ongoing here. We get together for special lunches, picnics, and other activities... We use the term consistently that this is a family (I1.M.2).

Over the last several years with budget cuts and no pay raises I believe it's been more important that we hold functions where you truly get a family atmosphere (I4.M.2).

Well this is my new family. My real family has given more sort of a two year sabbatical to come and be a part of this new family, that's the way I look at it (I2.M.2).

Promoting Leadership Development.

Commissioners believe in the future of agriculture leaders and in developing their personnel. They promote leadership development both in and out of the Department by providing leadership development opportunities. For instance, Commissioners work with school systems and universities in their state to provide these opportunities to students. They also provide training programs to their staff members.

I spend a considerable amount of money each year in sending staff to trainings, meetings, symposiums, and meetings in their professions so they can stay proficient in what they're doing (I1.M.4).

I recently spent all day on campus at [college] speaking to agriculture leadership students. I love college kids and being able to help them see their leadership opportunities (I8.M.4).

With all our farmers getting older we are interested in establishing a mentoring program as a way to attract more youth to agribusiness and become leaders. We are working with the land grant colleges and other institutions in high schools and colleges to try to help build (I9.M.4).

Conceptual Skills

The conceptual skills area had seven questions. Each participant was asked to respond to how proficient they believed they were in each leadership question. The response mean score, along with the standard deviation for each question, is listed in Table 11.

Commissioners believe they are *Above Average Proficiency* in the conceptual skills area.

Commissioners believe they are most proficient in the ability to think strategically and be decisive, while they are least proficient in setting goals and helping others support organizational change.

Table 11

Conceptual Skill Self-perceived Proficiency Item Response Scores

	μ	σ
Think strategically	4.49	0.61
Attitude that supports and that welcomes organizational change	4.38	0.68
Be decisive	4.35	0.68
Create a long term vision for the organization	4.14	0.71
Achieve goals	4.05	0.62
Help others support organizational change	3.97	0.64
Set goals	3.95	0.74

Note: Scores measured using Likert scale; 1 (Not Proficient) to 5 (Very Proficient); $n=35$

Commissioners validated the quantitative results during the interview process by discussing their proficiency levels in creating a vision for the Department, setting and achieving goals, and ability to plan strategically. Commissioners elaborated on their proficiency in the decision making process, which emerged as new finding in the conceptual skill area.

Vision.

Commissioners have a vision for their respective Department and their personnel. They believe their proficiency in communicating their vision to their personnel contributes to the success of their Department. They make changes to their vision when necessary to ensure everyone is moving in the same direction.

We've had to move some employees that are no longer here because of some tough situations. Some were good employees that violated some core principles. Some simply didn't meet the vision of where we're going (I13.M.5).

My vision is to have everybody moving in the same direction towards the big picture, doing their jobs and understand that each and every one of them is important and they are stakeholders in the Department (I2.M.6).

Setting and Achieving Goals.

Commissioners set goals for themselves and for the Department. They continuously evaluate their goals and believe they are proficient in goal setting. By setting goals, the Commissioners are able to get things accomplished at the Department and ensure the success of the agriculture industry in their state. Most Commissioners state they write down their goals each week and often meet with their state to create goals for the Department.

I have weekly goals and Sunday or Monday I have a list of things that I want to get accomplished for that week. And every year, which I got this from my old high school football coach, I try to write down 3 to 5 things I want to do better over the upcoming year (I11.M.6).

I try to set some goals for the Agency that can be aspirational and inspirational so people find greater meaning in the work that they do. They understand how their work contributes to attaining the aspiration and can find it to be inspiring to be working for an aspirational direction (I5.M.2).

I am a believer in goals and objectives and evaluating them as you move through (I9.M.5).

Strategic Planning.

Commissioners have a strategic planning process for their Department and have created teams of staff members, specifically division directors, to carry out these plans. They encourage working together amongst staff members. The Department is successful because the Commissioner is proficient in understanding the correct employees to utilize on a team in order to accomplish the Department's goals.

I've been here for ten months and I've initiated a strategic planning process for the Department (I5.M.1).

I have a strategic planning team made up of eleven people, which include our division directors and our senior level management (I8.M.3).

We access talent; we match talent to responsibility levels. We try to encourage collaboration across disciplines as much as we can, and knowing that the final product is more than the sum of our parts (I10.M.1).

Decision Making.

Commissioners gather input and bring in other people during the decision making process. They come to the decision making process without bias, but rather information.

Commissioners pride themselves in being able to utilize numerous groups and people both in and out of the Department. They are proficient at the decision making process because they have a lot of experience and help in the process.

I suppose step one is making sure you have all the facts. It's very important to listen to people and not violate core principles in making the decision. One of the core principles is to always be consistent in making decisions (I13.M.6).

I pride myself in trying to bring people together and come up with a consensus... You need to have a consensus and build agreement (I2.M.6).

If there is an issue we need some input on before we make a decision we always do outreach to those groups to try to get some feedback, and get their take (I4.M.4).

I don't make quick decisions, I'm really more of a deliberator where I want to hear the arguments if you will before I make my decision (I8.M.5).

Sometimes decisions are no-brainers and sometimes I have to have a lot of help (I9.M.4).

I've got a good circle who helps me make decisions, my wife is probably ahead on the list. She has a very keen ability assess and advise probably for the political ramifications and things as much or more than I did (I10.M.6).

Technical Skills

The technical skills area had seven questions. Each participant was asked to respond to how proficient they believed they were in each leadership question. The response mean

score, along with the standard deviation for each question, is listed in Table 12.

Commissioners believe their technical skills are in the *Somewhat Proficiency to Above Average Proficiency* category of leadership skills. The technical skills area was ranked the lowest in perceived proficiency compared to the other leadership skill areas. Commissioners believe they are most proficient in their ability to explain and interpret organization budgets, and they are least proficient in their ability to effectively integrate computer software programs.

Table 12

Technical Skill Self-perceived Proficiency Item Response Scores

	μ	σ
Interpret and explain organizational budgets	4.00	0.68
Develop budgets for all levels within the organization	3.72	0.94
Effectively use and search the internet	3.69	0.92
Effectively use computer software for word processing	3.58	0.84
Effectively use computer software for spreadsheets	3.19	1.06
Effectively use computer software for databases	2.92	0.87
Effectively integrate computer software programs (i.e. merge files)	2.70	1.00

Note: Scores measured using Likert scale; 1 (Not Proficient) to 5 (Very Proficient); $n=35$

Commissioners validated the quantitative results during the interview process by discussing their proficiency levels in budgeting for the Department. Commissioners did not discuss their proficiency in any of the other technical skills such as using computer software to accomplish various tasks. However, Commissioners elaborated on their proficiency in the dealing with state government policies, which emerged as new finding in the technical skill area.

Budgeting.

Commissioners identify that dealing with budgeting in the Department is the most challenging aspect of their job. Commissioners must assess which portions of their Department should undergo budget cuts; they gather appropriate information and make educated decisions. Commissioners are proficient in the budgeting process and must deal with these situations on a regular basis because the Department is a government organization.

The bad part about my job is dealing with budget cuts, deciding who the bottom positions in our Department are. Once you identify them you've got that cloud hanging over those positions until it's reconciled if they are actually cut or not (I3.M.2).

We are doing more with less, which eventually takes its toll. We have to be properly staffed to continue to elevate this industry in the discussion about the future of this state (I10.M.8).

Probably one of the biggest decisions I make, as a Commissioner is budget reductions. They are very difficult because the governor says that every Department has to propose a six percent budget cut, that's almost 2 million dollars that we have to cut out of the budget (I8.M.5).

We have had our budget cut three times, and each of the last three years we have totaled about 20 percent. We are back to funding levels from 2002, ten years ago. We are trying to do as much as we are doing before, we don't want to sacrifice services but we are doing it with fewer people and less money (I2.M.6).

My ideal Department of Agriculture would mean that we have an unlimited budget! I've been here six years and every year we've cut budgets. We had to let people go and that's hard when you see your Department increasing and you have reduced resources to meet that burden (I4.M.6).

Policies in State Government.

Commissioners identify that dealing with policies in state government is challenging for the Department. Commissioners are constantly making changes and developing new

policies with the help of staff members, which has emerged as a new technical skill for Commissioners. Commissioners believe they have a high proficiency level in this skill. Commissioners are working for a state government organization, thus, they must be well-versed in dealing with policies.

It has been different in dealing with the bureaucracy and policies and procedures of state government as opposed to working with my family (I2.M.2-3).

I admire what [my staff does] and their handicaps they have to work under, like the bureaucracy label kind of handicaps...Half of our work we do is regulatory, consumer affairs protection. If you have the wrong attitude, you can have the image of an enforcer or a facilitator (I3.M.2).

We are doing a top to bottom review of all of our programs and recommending changes to occur and legislative action that will be necessary to make those changes (I3.M.6).

I am responsible for helping to develop regulatory legislation that helps the Department accomplish our duties and mission (I7.M.1).

I enjoy spending all of my time working with agriculture issues and policies (I8.M.3).

Communication Skills

The communication skills area had seven questions. Each participant was asked to respond to how proficient they believed they were in each leadership question. The response mean score, along with the standard deviation for each question, is listed in Table 13.

Commissioners perceive themselves as being *Somewhat Proficient to Above Average Proficiency* in the leadership skills area of communication. Commissioners believe they are most proficient in interacting and communicating with people who have divergent points of view, while they are least proficient at writing for various organizational purposes.

Table 13

Communication Skill Self-perceived Proficiency Item Response Scores

	μ	σ
Interact and communicate with people who have divergent points of view	4.51	0.56
Recognize and effectively use nonverbal cues or behaviors	4.06	0.67
Read and comprehend a wide range of publications	3.97	0.77
Identify barriers to listening	3.92	0.60
Reduce barriers to listening	3.81	0.75
Write for various audiences	3.62	0.86
Write for various organizational purposes (i.e. technical writing, professional publications, etc.)	3.42	0.81

Note: Scores measured using Likert scale; 1 (Not Proficient) to 5 (Very Proficient); $n=35$

Commissioners validated the quantitative results during the interview process by discussing their proficiency levels in reading, listening, recognizing the types of communication to use in a particular setting, and interacting and communicating with people who have divergent points of view. Commissioners elaborated on their proficiency levels in speaking, interacting with the media, networking, using honesty when communicating, using electronic communication methods, and using social media in the Department, which emerged as new findings in the communication skill area.

Reading Skills.

Commissioners are proficient at keeping up with current information, which requires reading a lot of information sources like magazines, newspapers, and websites. Most Commissioners noted that reading skills are necessary to their job. They spend a great amount of time reading various news sources and scholarly articles about the agriculture field and politics at the state level as well as the national level.

I spend a significant amount of time reading information. One of the things I do is read farmpolicy.com, they cover all of the resources across the country and pull them all together. You can never have enough information and you always need to stay current (I14.M.4).

The learning curve has stayed current and this requires a lot of reading and personally adding to my education (I1.M.1).

Listening Skills.

Commissioners enjoy listening and believe they can learn more from their constituents by listening rather than speaking. They appreciate the opportunity to hear what their constituents have to say. Commissioners value themselves as being proficient at listening, which in turn allows their constituents to believe the Commissioner respects their opinions.

I still enjoy the speaking but I really listening, I like the dialog and the interaction (I8.M.5).

Again I talk too much at times but still I believe I can learn more by listening than I can in talking in most situations (I1.M.4).

I try to deal with the [state citizens] with a strong understanding of respect for them, their right and interest to speak to me and have me hear them (I5.M.3).

Recognizing the Types of Communication to use in a Particular Setting.

Commissioners are proficient at using different types of communication depending on particular setting. They enjoy face-to-face conversations the most, however, they recognize the need to change their style depending on how fast, when, or where they need to communicate.

My communication skills have changed, and they change from situation to situation (I1.M.4).

We do take a lot of phone calls on various issues, but face-to-face allows you to really get to know someone (I3.M.4).

A phone call or face-to-face time raises the importance tremendously. Hearing somebody's voice, you'll hear whether or not they are emotionally into the discussion and you understand the intensity of the situation better. You can understand their body language too in face-to-face communication (I3.M.5).

I think face-to-face is the most effective. You can't read somebody through an email. When you are sitting face-to-face with somebody you can read that person, not just what they're saying but body language says a lot and their reactions to certain comments (I4.M.5).

I think that in terms of being able to get the word out quickly on an issue or touch the most people in the shortest amount of time that radio is probably the most effective method of doing that in our state, way more effective than any news paper or magazine that we would have access to (I7.M.4).

The most effective way for me to communicate is to be able to go and speak with people and listen to them and interact, like going to the town halls and public forums, but obviously you do not reach the masses that way (I8.M.4).

Interact and Communicate with People who have Divergent Points of View.

Commissioners believe they do an excellent job of including people with different viewpoints in discussions. They like to see both sides of an issue and value talking to people who do not always agree with the Department's viewpoints. Commissioners believe their proficiency in interacting and communicating with people who have divergent points of views has contributed to the success of their respective Department.

We try to find out both sides of the issue (I4.M.5).

You accommodate people of different personalities and mindsets (I10.M.8).

We brought together for the first time ever all of the agriculture groups in [state]... The opportunity to bring in all that diversity and varied interest and get them to agree on a common message that we then delivered to the governor was pretty cool (I2.M.2).

I try not to “get in bed” so to speak with environmental groups, but I think there are ways that we can collaborate and work together... even when there are groups that I don’t agree with I’m still willing to meet with them and see if there are some areas of common interest which is very important (I8.M.2).

I really tried to go the extra mile and have conference calls with groups that do not normally interact with us to make sure I was reaching out to all of the different groups to get input (I12.F.3).

Speaking Skills.

Commissioners identify that they are good public speakers. They have a multitude of speaking engagements and are constantly attending events in their respective state to talk to constituents. They enjoy speaking but also appreciate having a dialogue with someone. Commissioners believe they are proficient in their speaking skills and this is necessary because they are the voice of the agriculture industry for their state.

I still think most of my communication skills are in those direct appearances where I speak to groups or organizations or when I’m doing an interview with a radio station (I7.M.5).

Usually it’s at farmers markets, fairs, service organizations that ask you to speak, and a lot of times there are a lot of telephone conversations. In a 5 day week I have about 3 to 4 significant conversations with non-farm [state] residents, which usually relate to buying or selling local foods (I11.M.4).

It’s great for me to go out and give speeches and I like to, but I really like to when the setting allows that I get some open-end comments and it’s much more interactive where there are questions (I12.F.3).

We regularly are invited to interact with organizations to speak in general about what we do at the Department and what services we provide and how we affect their daily lives (I15.M.4).

Media Interaction.

Commissioners are proficient at interacting with the media, and they enjoy speaking on behalf of the Department with the media. They are always looking for opportunities to

share news with the media. The Commissioners value good press and do not like when they or their respective Department is viewed negatively.

Whether it's radio or TV...I enjoy speaking on behalf of agriculture (I10.M.6).

I provide guest opinions or editorials to various publications across the state several times during the year so that I can reach out and communicate with citizens directly there as well (I7.M.3).

We have gotten some good press on a new program. We got our local TV station to come out and cover it, there are some local writers that have picked it up, and a radio station that has picked it up that wants to talk to me about it (I2.M.5).

Typically, the press always covers important events I might speak at and they are on the news or in the newspaper, which I think, is good (I8.M.4).

We do press releases, especially about food safety, so we have a lot of consumer protection responsibilities and if there is an issue that needs to be communicated we do that (I9.M.3).

Someone was in my office one day and said, I do not read much about you in the political circles. I said you think that is by accident? (I10.M.3).

Networking.

Commissioners are excellent at networking with organizations in the agriculture industry and beyond. They often attend events for commodity groups and other agricultural organizations. People know who the Commissioner is in their respective state.

Commissioners believe that their proficiency in networking allows the Department to achieve its goals. Knowing people in the agriculture industry helps the Department to succeed and to bring groups together.

I have created partnerships with organizations in the agriculture industry and have been active in conducting programs (I1.M.2).

A lot of the work that you do in this kind of arena is networking; it's about building those relationships with people and knowing people from their personal sides to work sides (I3.M.1).

We try to work with agriculture commodity groups and make them a part of us. We make sure that they are informed about everything we do and make them apart of it. We try to stay in close touch with them (I9.M.5).

I have been in the industry for so long that a lot of people know me, they call me and they feel that they are welcome. They feel like they can call me anytime and they do (I11.M.4).

Honesty.

Commissioners value that they use honesty when they communicate with others. Commissioners believe that using honesty, especially when communicating about controversial decisions, allows the public to view them and the Department in a positive light. Commissioners also believe that communicating with honesty allows the Department to become a trustworthy organization in the agriculture industry.

My responsibilities as a public servant are to most effectively address what their concerns and opportunities are and to be honest and straightforward, as transparent as I can be with any issue (I5.M.3).

Regardless of the type of communication, I think people can sense whether I am being honest and sincere (I11.M.5).

I like face-to-face communication and honesty, and that's worked for me for the past 67 years. I also think kindness, you have to have a huge does of kindness and honesty and that pays back serious benefits (I14.M.3).

Electronic Communication.

Commissioners or their respective Department do an excellent job of keeping up with the changing technology. They utilize electronic communication frequently and value the convenience of this technology. Email is one of the most frequent methods of

communication; however, Commissioners still value face-to-face communication over electronic communication. Being highly proficient in electronic communication ultimately allows the Commissioner and the Department to successfully broaden the reach to their constituent base.

I think technology is changing the way we communicate, emails and text messages I use quite frequently...Not that long ago I didn't text, and now I send several hundred a day (I6.M.4).

Technology has caused communication skills to change. One of the first things we did when I came here was start an e-newsletter because we didn't have the money to have a newsletter printed up and mailed out. An electronic newsletter was possible and so we started one up quickly, it was immediately responded to that they appreciated it (I3.M.5).

I certainly email a lot and I think it is effective, but it does not replace face-to-face communication or a phone call (I3.M.5).

We have a new in house series that we publish on our YouTube channel called What do You do, What do You do, because that's the question I get asked most frequently (I13.M.3).

We have worked with our extension system in [state] on two occasions to have a webinar, which is widely available online... We were able to attract people and it is all archived so people are still able to tune into that and watch it (I9.M.3).

Social Media.

Commissioners have made it a point to use social media at their respective Department to reach more of their constituents. Some of the Commissioners have personal social media accounts as well. Social media like Facebook, Twitter, and blogs are utilized the most in the Department.

I have a Twitter account and I have a Facebook page. I'm just getting started with it so I'm not yet reaching the masses but it's the little things like that and just being available (I8.M.4-5).

Communication is the whole package. It's the Facebook-ing and Twitter-ing (I2.M.5).

We were committed to establishing a social media presence and we've done so (I13.M.3).

Utilizing technology has required a change in the methods that we use to communicate. The Department is now on Facebook and Twitter (I3.M.5).

New kinds of areas that the Department is involved in include a Facebook presence, Twitter, blogs, and other ways to reach out to be a part of the public's conversation (I6.M.4).

The Department has a Facebook and a Twitter. We post information about day-to-day activities, press releases, and stuff we find interesting or that we want to promote that other organizations are doing well (I7.M.4).

The Department also uses Facebook and Twitter. I also have a Facebook page from my campaign, but I leave that to my wife (I10.M.7).

We really try to use social media here. I started a blog a couple of months ago and that has been very successful and well received. The public affairs people told me they are going to teach me how to use Twitter so I can tweet when I'm out on the road (I12.F.2).

Emotional Intelligence Skills

The emotional intelligence skills area had eight questions. Each participant was asked to respond to how proficient they believed they were in each leadership question. The response mean score, along with the standard deviation for each question, is listed in Table 14. Commissioners believe they are *Above Average Proficiency* in the majority of the emotional intelligence skills. It is important to note that Commissioners rated setting priorities to effectively manage personal time as the lowest of the emotional intelligence skill items, while they rated having a high level of motivation as the highest.

Table 14

Emotional Intelligence Self-perceived Proficiency Item Response Scores

	μ	σ
High level of motivation	4.49	0.56
Control emotions in emotional situations	4.23	0.73
Negotiate agreement	4.17	0.62
Make use of constructive criticism without becoming critical and angry	4.14	0.65
Resolve conflict	4.11	0.63
Set priorities to effectively manage organizational time	4.03	0.57
Respect for the time commitments of others	4.03	0.71
Separate personalities from behaviors	3.94	0.73
Set priorities to effectively manage personal time	3.91	0.89

Note: Scores measured using Likert scale; 1 (Not Proficient) to 5 (Very Proficient); $n=35$

Commissioners validated the quantitative results during the interview process by discussing their proficiency levels in resolving conflict. Commissioners elaborated on their proficiency levels in recognizing their emotions and personality, which emerged as a new finding in the emotional intelligence skill area.

Resolving Conflict.

Commissioners are able to successfully resolve conflict by finding out all sides to the issue. They also understand that their role as Commissioner is to resolve conflict in their state and they must take the initiative. By having a high proficiency in the ability to resolve conflict, the Commissioners are able to move the agriculture industry forward in their respective state.

I chaired [a national association] for a number of years...I wasn't bashful in expressing my concerns, in fact I initiated the first telephone communication with all the state's representatives in order to solve problems (I1.M.2).

I am here to solve problems, give counsel and advice (I1.M.6).

It is important to try to find out both sides of the issue. I was told a long time ago there are three sides to every story, a sure side, my side, and the truth (I4.M.5).

Emotional and Personality Recognition.

Commissioners have a high level of proficiency in recognizing their emotions and personality. They understand when it is appropriate and inappropriate to let their personality and emotions appear during a situation, especially when dealing with staff and the public. Commissioners believe having a high level of proficiency in recognizing their emotions and personality ensures that the Department maintains a high-quality, trustworthy organization in the agriculture industry and in the government.

I do not let my ego get in the way of listening to good advice (I10.M.6).

When I address staff, I always use humor in even the most serious matters, it keeps us from getting so much on edge (I10.M.6).

Focusing on the job and not yourself, carries you a long way (I10.M.8).

My concern for myself is I'm a push over; I have to be careful because I need to have a delicate balance (I14.M.3).

I'm getting older so I'm prone to not caring about what people think as much (I15.M.6).

Industry Knowledge Skills

The industry knowledge skills area had seven questions. Each participant was asked to respond to how proficient they believed they were in each leadership question. The response mean score, along with the standard deviation for each question, is listed in Table 15. Commissioners self-perceived proficiency in the industry skills area is *Above Average*. It

is important to note that their ability to explain the political environment of the state and the implications for the Department was ranked highest in proficiency, while identifying the needs of various client groups in the state was ranked as the lowest.

Table 15

Industry Knowledge Self-perceived Proficiency Item Response Scores

	μ	σ
Explain the political environment of the state and the implications for the Department	4.59	0.56
Create linkages within both traditional and non-traditional audiences	4.38	0.49
Being able to explain the founding principles of the Department of Agriculture with constituents	4.29	0.84
Depth of knowledge in a content area	4.18	0.72
Relationship between statewide programs	4.12	0.64
Evaluate the impact of programs for each client group	4.12	0.64
Identify the needs of various client groups within the state	4.00	0.77

Note: Scores measured using Likert scale; 1 (Not Proficient) to 5 (Very Proficient); $n=35$

Commissioners validated the quantitative results during the interview process by discussing their proficiency levels in interacting with the constituent base and knowing the political environment influencing the Department. Commissioners elaborated on their proficiency levels in understanding the importance of the Department at a national/international level, and in understanding the role of the Department, which emerged as new findings in the industry knowledge skill area.

Interactions with the Constituent Base.

Commissioners are highly proficient in meeting new constituents and interacting with them in their respective state. Commissioners spend a lot of time traveling and interacting

with people to hear their concerns. They feel coming from an agriculture background is important and allows them to relate to their constituents. Commissioners ultimately believe that their strong tie to agriculture helps the Department to be viewed as approachable and a credible source of information for their constituent base.

Time and time again I've heard that the Secretary is the face of the Department and so you need to be traveling and representing the Department at a variety of different events- like a county Farm Bureau meeting or a state Farmers Union meeting, whatever it is. That is pretty much what I've focused on for the first 6 months (I2.M.4).

That has been my focus, to be the face of the Department, to get out and be with the people; that's the part I love (I2.M.4).

That's been the most rewarding part of being Secretary, to travel around the state and meet people that otherwise I would have never had the opportunity to meet or see (I4.M.3).

But I think the most important part about my job is being accessible. When you get out at these individual events it gives producers the opportunity to talk to you face-to-face and explain their point of view or an issue. Whenever we hear those issues out in the field, we try to come back and figure out if there is something we can do to resolve it. Sometimes we get suggestions to improve processes and procedures that we use. I've always felt like being out there and engaged is the most important part of the job (I4.M.3).

I spend a lot of time traveling the state working with agricultural organizations and commodity groups (I7.M.3).

Our farm is diverse, we've got corn, soybeans, wheat, beef cattle, dairy, used to be in the hog business. So I can stand and talk to any farmer and relate to them on their level (I2.M.4).

I think the fact that my family has been in agriculture for so many years gives me credibility with my fellow farmers (I10.M.4).

Knowing the Political Environment Influencing the Department.

Commissioners are proficient at understanding the political environment that influences the Department. They make an effort to interact with political figures in the state and educate them about the Department and the agriculture industry. Having a high proficiency in understanding the political environment influencing the Department ultimately allows the Commissioner to lead the Department to accomplish its goals.

One of initiatives that we started this year to foster our relationships and educate people is called “Harvesting with the Ag Stars.” The goal is to get all of our urban legislators paired up with a farmer and invite them out to ride in the columbine and talk about agriculture... I would love to expand that to county officials and other cabinet officials. Agriculture is our state’s largest industry and it is extremely important to our state. It’s good to let them know what we are doing and how we are doing it (I2.M.4-5).

The connection of agriculture to other areas of regulation is really wide and we have the opportunity to work with a lot of people involved in government (I6.M.3).

I work with all of our elected officials, especially our congressional delegation, our Senators and Congressmen. If they have a question about agriculture policy or how our policy might affect [state] most of the times I’ll be one of the people they will touch to get input on those issues (I7.M.3).

Understanding the Importance of the Department at a National and International Level.

Commissioners have an excellent understanding of the importance of the Department at a national and international level. They are proficient at communicating and engaging with policy makers involved in agriculture at the national level. They are also proficient at encouraging international communication with commodity groups. Thus, this high level of proficiency allows the Commissioners to successfully lead the Department and expand their contact with other organizations outside of their respective state.

Through my role as Commissioner, I have been on various national [USDA] committees...I served six, two-year terms and I was only supposed to serve one (I1.M.2).

In the past 10 years the Department had to accept additional responsibility in homeland security. I have a division now that is dedicated to homeland security... I have endeavored to give my staff the tools needed to stay current with our federal counterparts in analytical capability (I1.M.5).

Another rewarding part about my job is in the promotional area and what we've been able to do over-seas to promote [state] as a brand within the United States commodity category (I7.M.2).

Understanding the Role of the Department.

Commissioners have an excellent understanding of the role of the Department.

Commissioners voice the need for the agriculture industry to succeed and receive recognition in their state. By understanding the role of the Department, the Commissioners are able to lead their Department to achieve their mission of bringing more recognition to the agriculture industry.

Basically since I have been Commissioner of Agriculture, rural people were never really given credit for their stable industry and stability in their economic contribution to the state until just recently. And some of my greatest battles have been with the academic community, which at one time thought that we should move people off of the farms and into the city...But to see the respect that is coming back to the rural community is one of my greatest achievements (I1.M.1).

The best experiences that I've had so far are the opportunities to go out and meet operators and see how people have adapted to a changing industry, and the role that the Department plays to help them to adapt to these changing times (I4.M.3).

I just want to industry to succeed and prosper. I'm always looking at new ideas for the Department in order to make that happen (I8.M.6).

My biggest goal is that the Department spends every day focused on ways that we can make a difference for farmers and ranchers and all [state] residents (I12.F.4).

Leadership Skill Self-perceived Proficiency

Scores for each self-perceived leadership skill area are presented in Table 16. Each construct was converted to a 100-point scale by dividing the sum of the responses by the total possible response score for each skill area. As shown in Table 16, the two highest mean scores were industry knowledge skills ($\mu=84.80$, $\sigma=4.66$) and conceptual skills ($\mu=83.80$, $\sigma=4.68$). The lowest score was technical skills ($\mu=68.00$, $\sigma=6.31$). The overall mean for self-perceived proficiency in the six leadership skill areas was 80.03, with a standard deviation of 5.17. In all areas of self-perceived proficiency of leadership skills Commissioners seem to indicate that they are proficient in these six leadership skills. Commissioners believe that they are least proficient in technical skills, while they are least proficient in industry knowledge skills of the six leadership skill areas.

Table 16

Leadership Skill Self-perceived Proficiency

	μ	σ
Industry Knowledge Skills	84.80	4.66
Conceptual Skills	83.80	4.68
Human Skills	83.20	4.29
Emotional Intelligence Skills	82.33	6.09
Communication Skills	78.03	5.02
Technical Skills	68.00	6.31
Total Proficiency Scale	80.03	5.17

Note: The possible scores for self-perceived proficiency range from 20 to 100. Scores that fall between 80 and 100 are *Above Average Proficiency* and *Very Proficient*. Scores falling between 60 and 80 are *Average Proficiency*. Scores falling below 60 are *Below Average Proficiency* (Jones, 2006; Moore, 2003). $n=35$

Objective 4
Identify Gaps in Leadership Skills and Proficiency Level of Commissioners

The difference between mean scores for the importance of each leadership skill area and the self-perceived proficiency level of the study’s participants are reported in Table 17. Means for the perceived importance of leadership skills were higher in all areas than the means for the self-perceived proficiency of leadership skills. The largest gap between mean scores was in the leadership area of technical skills (μ Importance=79.06, μ Proficiency=68.00) for a difference of 11.06. The scale with the smallest amount of difference occurred in the industry knowledge skills area (μ Importance=85.71, μ Proficiency=84.80), which resulted in a difference of 0.91.

Table 17

Difference Between Mean for Importance and Proficiency

	μ (Importance)	μ (Proficiency)	Gap
Technical Skills	79.06	68.00	-11.06
Human Skills	90.20	83.20	-7.00
Conceptual Skills	90.17	83.80	-6.37
Communication Skills	83.28	78.03	-5.25
Emotional Intelligence Skills	87.33	82.33	-5.00
Industry Knowledge Skills	85.71	84.80	-0.91
Total Proficiency Scale	85.96	80.03	-5.93

Note: n=35.

Commissioners did not validate the quantitative results during the interview process. Commissioners do not mention having gaps the leadership skill areas and they do not think they have to change. They are satisfied with their leadership abilities and believe they work hard every day to achieve the goals of the Department.

Other Emergent Findings

When doing a mixed methods study often times themes will emerge outside the original research questions. The following are other significant findings from the data.

Previous Leadership Experiences

4-H and FFA.

The majority of Commissioners were involved in 4-H and FFA (I1, I3, I6, I7, I8, I9, I10, I12, I13, I15). They were able to identify that their participation in 4-H and FFA helped develop their leadership skills or were significant motivators to become a future leader.

I was an active 4-H and FFA member and there is no doubt I am where I am today because of those two organizations (I3.M.2).

Integral and important organizations were FFA, 4-H, and my agriculture fraternity, the agriculture economics department at [university]; they were all instrumental in pushing me to develop (16.M.2).

I think probably some of the work I did with party politics helped me understand politics and strategy. But probably the biggest activity that I participated in that helped me develop critical thinking, being able to analyze and evaluate, make a decision and move on and not necessarily look back, was purchasing livestock and livestock evaluation during high school 4-H and college judging teams (I7.M.5).

Literally I can say that my time in FFA had more to do with my leadership skills than anything else. I was just a rural farm kid; I was pretty shy, wasn't very outgoing and didn't consider myself to have a lot of internal leadership skills. I got in FFA and I had that teacher that took me under his wing and literally showed me the way even when I didn't believe in myself (I8.M.1).

I was initially involved in 4H and in fact it was a trip to Washington, DC that I got to visit with my congressional officers and got to tour historical sites and be involved in events where leadership in agriculture were able to share experiences with 4H'ers. That's where I got my initial interest in being a public servant (I15.M.2).

Not only did Commissioners identify 4-H and FFA helped them to develop leadership skills, they were able to practice these leadership skills in officer positions through the organizations. The majority of Commissioners involved in 4-H or FFA held officer positions within the respective organization (I1, I3, I6, I7, I8, I13).

I was a 10-year 4-H member, involved at the club level. I was in FFA involved in the chapter level, district level, and state level involved in leadership opportunities (16.M.2).

I was appointed to several different 4-H boards and statewide boards, so all through high school and college I was involved in activities that were on the leadership track (I7.M.2).

I was very active serving as state president and national vice president for FFA (I8.M.1).

I was state president of [state] FFA (I13.M.5).

Differences Between Appointed vs. Elected Commissioners

Of the Commissioners who participated in the phone interviews, 11 were appointed and four were elected.

Relationship with the Governor.

Appointed Commissioners focused on their relationship with the governor. The governor is viewed positively and encourages collaboration among the cabinet, different state Departments, and constituents.

The governor encourages collaboration with the other Departments so that we aren't working in our "silos" so that I know what's going on at other Departments and they know what's going on over here (I14.M.2).

I think probably one of the highlights involves the governor. His willingness to engage agriculture and wanting to be informed has helped. We brought together for the first time ever all of the agriculture groups in [state] (I2.M.2).

The governor has done a nice job of fostering access to his people, his inner circle so to speak. And again, a whole new family is the cabinet (I2.M.4).

The governor came out and visited our Department and we told him about what we did here and how we did it. We showed him and he went around to the various buildings and visited and shook hands with the employees. So they know that he recognizes their importance too, which went over very well. He was the first governor that had done that in 30 years (I3.M.3).

I have a great relationship with the governor. He visits every Department, so that's just the kind of leadership that he is (I3.M.3).

I have a direct line of communication with the governor. He does have a chief of staff but in [state] as far as my agency and my position if I need to talk to him I call directly; I don't need to be filtered through the chief of staff or anybody like that which is kind of unique compared to other states... He recognizes the importance of agriculture and appreciates that dialog directly (I7.M.3).

The governor is very focused on collaboration amongst the cabinet members to identify problems and solutions. I really enjoy my colleagues and the cabinet, they are talented people with a wide range of service to the state and history with our programs. We have a lot of informal as well as formal opportunities to interact (I12.F.2).

Decisions involving the Governor.

Appointed Commissioners agree that they have to be more careful than an elected Commissioner during the decision making process. Appointed Commissioners focused on how their Department's decisions must be in line with the governor's agenda for the state.

Big decisions revolve around the governor, so in many ways I have a constituency of one (I14.M.4).

I just have to be much more careful about what I say and how I say it- making sure that I am reflecting the views of our administration in our Department, not just my views (I2.M.6).

A lot of the things that we support in the legislator are Republican issues and I serve for a Democratic governor. It presents certain issues but from the governors perspective he understands. When you are working through

compromise or resolution it does make it a little more challenging. At least this governor has been able to be non-partisanship and if it's for something he believes is right for the industry he's willing to step up (I4.M.4).

Perceptions.

The Commissioners have differing perceptions about if the Commissioner in their state should be elected or appointed. The Commissioners believe there are advantages to both. Appointed Commissioners usually have a positive relationship with the governor and aim to educate the governor about agriculture issues facing the state. Elected Commissioners are able to set their own agenda, whereas appointed Commissioners must cooperate with the governor's agenda.

I'm appointed by the governor and I'm a voice for the agriculture industry. My opinions matter but they are not the official opinions. I interact very closely with the governor, he's the boss. I want to help educate him and even persuade him at times, but he is still the boss (I8.M.2).

I think there are advantages to both. As an elected official you have to opportunity to set your agenda a little more independently but you also have to constantly have to try to stay popular enough to maintain your elected position... As far as in our state as an appointed director the department of agriculture holds a high prominence to the governor (I7.M.6).

I think the people should have a choice of who they want to be Ag commissioner. And that is an issue here since I am not seeking re-election. [State] code provides requirements for the commissioner of agriculture to serve and be elected here in [state] and this is verbatim what is in the statutes, The commissioner shall be a practical farmer, learned in the science of agriculture, and have shall made agriculture his chief business for a period of ten years immediately preceding his election. So this takes politicians out of the equation (I1.M.5).

I don't necessarily believe one is better than the other. It depends on the dynamics and demos of the state. Over the years in [state] we've been very fortunate that most of the Secretaries that were appointed were appointed because of their backgrounds and abilities (I4.M.1).

The one thing I feel is important is that I didn't know the governor until after he was elected. It wasn't a political payback and I didn't campaign for the governor, so it made the process seem a lot more whole (I4.M.1).

You also have to remember that I am an appointed Commissioner, not elected. The governor appointed me. I'll tell you what that does- there are differences. It makes a strong governorship because everything is under the governor. It's perceived that when you are an elected Commissioner, everyone's not on a team. They feel that they can do the independent and not as a collected team. I feel we've got the right system. So you have to make it work (I3.M.6).

When I came in on the appointed basis, I'm not sure how it is with the elected basis, but the thought was who is best to serve in this position. I was fortunate that they were comfortable with me and it was easy for the governor to select me because he had no push-back. I'm a known quantity in [state], it wasn't like they were getting someone to lead the Department that they had not experience with agriculture. If you were elected, you have to go out and make that case and if you are a known quantity it probably is a little bit easier as opposed to having to introduce yourself to all of the voters (I14.M.2).

Service as Commissioner

Commissioners are passionate about the agriculture industry and enjoy serving in their leadership role. They do not serve as Commissioner for personal reasons; they strive to make a difference in the industry and to lead their constituents. Commissioners desire to leave their mark on their state and Department.

It's the passion for the agricultural industry that really drives you to do a good job and that's what I try to do (I4.M.7).

In my case, while I'm very interested in the effects of policy of agriculture and helping to hopefully move that in a very strategic and productive way, I really just am fortunate to have the opportunity to serve in the way I am (16.M.1).

It was kind of a shock when I was asked to consider taking on the position, and I was extremely honored. Again, you just do these things. You don't do them for personal gain or benefit; you do them for service to the industry and to the state. As you go along, things just kind of accumulated up and some

people took attention to that and noticed that I had done all of the things that you need to do to potentially be a Secretary of Agriculture (I2.M.3).

So my goal is a year from now for agriculture to be in the leadership's minds, the gatekeepers of opinions and agriculture will seriously be on their radar. My goal is when I'm done here that I've made a difference (I10.M.7).

When I leave a few years from now to retire, I want to leave the Department in a stable state with a good leadership team. I want to leave a good legacy (I11.M.5).

CHAPTER V: SUMMARY AND DISCUSSION

An overview of the research and conclusions are included in this chapter. Topics addressed include a discussion of the conclusions, recommendations for practice, and implications for future research.

Purpose and Objectives

The agriculture arena is undergoing a significant time of change, and Commissioners are responsible for ensuring success for their state's agriculture industry. These changes include advances in technology, budget deficits, and controversies in agriculture. The purpose of this study was to describe characteristics of identify and define the leadership skills needed by Commissioners overseeing their state Department of Agriculture. The self-perceived level of proficiency of current Commissioners was assessed in each of the six leadership skill areas, which include human, conceptual, technical, communication, emotional intelligence, and industry knowledge skills.

The study addressed the following objectives:

- Determine the demographic characteristics of Commissioners of Agriculture (gender, length of term, age, academic background, past leadership roles, and past leadership training).
- Assess level of perceived importance of leadership skills, as determined by Commissioners of Agriculture.
- Assess self-perceived proficiency of leadership skills of Commissioners of Agriculture.
- Identify gaps in leadership skills and proficiency level of Commissioners of Agriculture.

Theoretical Frame

The theoretical framework for this study is based on Moore and Rudd's (2004) study of the leadership skills and competencies of Extension directors and administrators and

Jones' (2006) study of leadership skills of academic program leaders in colleges of agricultural and life sciences. The six leadership skill areas, which served as a basis for this study, are necessary for successful leaders to possess; however, the amount of each skill that a leader possesses may vary depending on one's position in an organization (Moore & Rudd, 2004).

Methodology

The population for this study included Commissioners of Agriculture denoted in the directory of the National Association of State Departments of Agriculture, with a total of 50 for the population. This study utilized a mixed methods approach to identify and define the leadership skills of Commissioners of Agriculture at the state level (Fraenkel & Wallen, 1996).

Quantitative research methods were used by employing an electronic survey instrument to describe Commissioners perceived importance and self-perceived proficiency levels in the six leadership skill areas. Thirty-five responded to the research for a response rate of 70%; t-tests examined differences between early and late respondents, and there were no differences in the mean scores for the two groups (Miller & Smith, 1983). Descriptive statistics were used to analyze the data collected by the instrument. Relationships between their perceived proficiency levels and their perception of leadership skill importance were also determined.

Qualitative research methods were used to enhance the quantitative results and gather further demographic information about the participants of the study (Jick, 1979). Phone interviews were conducted with the participants to further explore the six leadership skill

areas, while continuing the search for meaning. The traditional method of constant comparative analysis was used for the qualitative portion of the study (Merriam, 2009). The methodology consisted of the unitization of data, categorization of units, merging categories, and journaling (Merriam, 2009). Based on the findings of the study, the following conclusions were made.

Conclusions/Implications

Research objective 1.

Objective 1 sought to determine selected demographic characteristics of Commissioners. The demographic variables this study included were gender, length of term, age, academic background, and past leadership experiences. Findings of Objective 1 showed all Commissioners were male who participated in the leadership skills questionnaire. Of the 15 Commissioners participating in the phone interviews, one was female. This study found 91.4% were white, 5.7% were Asian, and 2.9% were African American. All of the Commissioners participating in the phone interviews were white. According to the leadership skills questionnaire, Commissioners had a range of 51 years in terms of their age and the mean age of the Commissioners was 56.03 years old. The age range of participants in the phone interviews was similar, ranging from 35 to 84 years. Commissioners of Agriculture represent the white male stereotype. There is little diversity among this population with regards to gender and race.

The academic major of each participant's undergraduate degree was classified as either an agriculture degree, science degree (including life sciences and engineering), or a humanities/social science degree. This study found 62.9% of the respondents received an

undergraduate degree in an agriculture field, 17.1% held a science degree (including life sciences and engineering), and 8.6% held a humanities/social science degree. Less than a third of the Commissioners went on to achieve education higher than an undergraduate degree. Of the 35 participants, 5.7% held a doctor of philosophy degree (one in political science and one in agriculture), 2.9% held a doctor of veterinary medicine degree, 14.3% held a master's degree in an agriculture field, and 8.6% held a master's degree in a humanities/social science field. Researchers concluded that most Commissioners hold an undergraduate degree in a field of agriculture and some go on to achieve higher education. While degrees in agriculture seem to predominate the educational backgrounds of Commissioners, they are not viewed as requirements for the positions, nor are advanced degrees. Over one-third of the respondents held degrees outside of agriculture and less than one-third earned advanced degrees.

Participants' service in the Department ranged from 6 months to 44 years. The mean number of years the participants had been employed by the Department was 7.41 years. The fewest years a participant had in the position as Commissioner was 0.33 years while the most was 43. The mean for the number of years serving in the Commissioner position was 4.35 years. The tenure for Commissioners in this country is very short. Most of the Commissioners have not been in their position for an extended period of time. However, some Commissioners have served in their position for numerous years or have previous experience at their respective Department for about seven years before serving as Commissioner.

The majority of Commissioners held a leadership role within their state or at the national level in an agriculture organization, or at the Department. Also, the majority of Commissioners grew up on a farm. The majority of Commissioners received leadership training from 4-H or FFA and discussed at length the importance of these youth organizations to their leadership development. The researchers conclude that Commissioners are from rural areas and have a farming background. Commissioners represent the voice of agriculture in their state and it is important for them to have experience in this field. Commissioners received training from their past leadership experiences in the field of agriculture, 4-H and FFA, and on-the-job training due to their farming background.

Research objective 2.

Objective 2 sought to assess the level of perceived importance of leadership skills, as determined by Commissioners of Agriculture. Commissioners were asked to assess the level of importance of specific leadership skills from *Not Important* to *Very Important*. The leadership skills were divided into six areas: human skills, conceptual skills, technical skills, communication skills, emotional intelligence skills, and industry knowledge skills. The possible scores for perceived importance range from 20 to 100. Based on Jones' (2006) and Moore's (2003) studies, scores falling between 80 and 100 are *Important* and *Very Important*. Scores falling between 60 and 80 are *Somewhat Important*. Scores falling below 60 are of *Little Importance* to *Not Important*.

Commissioners rated human skills as the most important leadership skills ($\mu=90.20$) followed by conceptual skills ($\mu=90.17$), emotional intelligence skills ($\mu=87.33$), industry knowledge skills ($\mu=85.71$), and communication skills ($\mu=83.28$); technical skills was rated

as the least important ($\mu=79.06$). It can be concluded that Commissioners perceive human skills as the most important. These findings were similar to Jones' (2006) and Moore's (2003) studies of extension and academic program leaders; five of the six leadership skill areas are *Important* or *Very Important*, while only one of the five skill areas was rated *Somewhat Important* for Commissioners.

Through the interviews, the researchers found that Commissioners believe it is important understand the role of the Department at a national and international level. Commissioners need to have industry knowledge skills about agriculture, but they should also be well-versed in national and international issues impacting their state's agriculture industry and Department.

The researchers also found that Commissioners believe electronic communication is an important skill. Leaders in the agriculture industry should have a working knowledge of electronic communication. Departments will fall behind in the industry if they are not utilizing social media and other forms of technology to communicate with their constituents.

Though technical skills were ranked lowest in importance, Commissioners still discussed at length a working knowledge of budgeting. Commissioners identified that budgeting and dealing with cuts in their Department's budget was the most challenging part of their job. Another challenging part of their job includes government policies, which is another technical skill that emerged. Commissioners believe it is important to have a working knowledge of government policies that their Department is required to enforce.

Research objective 3.

Objective 3 sought to assess the self-perceived proficiency of leadership skills of Commissioners of Agriculture. Commissioners were asked to rate their self-perceived level of proficiency for each of the skills in each leadership skills areas. The possible scores for self-perceived proficiency range from 20 to 100. Scores that fall between 80 and 100 are *Above Average Proficiency* and *Very Proficient*. Scores falling between 60 and 80 are *Average Proficiency*. Scores falling below 60 are *Below Average Proficiency* (Jones, 2006; Moore, 2003).

Four of the six leadership skill areas had means for self-perceived proficiency that fell between 80 and 100, and the remaining leadership skill proficiency areas fell in the *Average Proficiency* category. Commissioners rated their proficiency in the human skills, emotional intelligence skills, industry knowledge skills, and conceptual skills areas as *Above Average Proficiency*. The industry knowledge skills proficiency area ranked the highest ($\mu=84.80$) followed by conceptual skills ($\mu=83.80$), human skills ($\mu=83.20$), emotional intelligence skills ($\mu=82.33$), and communication skills ($\mu=78.03$); technical skills was rated as the least proficient ($\mu=68.00$).

These findings demonstrate that Commissioners believe they have the least amount of proficiency in technical skills, but they believe they have a great deal of proficiency in the leadership area of industry knowledge. Commissioners realize having knowledge about the agriculture industry are important and place little importance on tasks that can be performed for them like emailing and scheduling. It is encouraging that Commissioners believe they are *Above Average* in the industry knowledge area of leadership skills because they are elected

or appointed to serve the agriculture industry in their state. Through the interviews, the researcher found that Commissioners believe they are proficient in understanding the role of the Department at a national and international level because they must be well-versed in issues impacting their state's agriculture industry and Department.

Through the interviews, the researcher also found that Commissioners believe their Department is highly proficient in utilizing social media and electronics to communicate with their constituents. Some Commissioners are making an effort to learn how to use social media and electronics; however, they often do not have the time to devote to these tools and have personnel in the Department designated to managing these tools. Commissioners believe their Department will fall behind in the industry if they are not utilizing social media and other technologies to communicate with their constituents. Commissioners also emphasized the necessity to use honesty when communicating with constituents. Honesty allows constituents to trust the Commissioner and the Department.

Though technical skills were ranked lowest in proficiency level, Commissioners still discussed a working knowledge of budgeting. They identified the most challenging part of their job is dealing with cuts in the Department's budget followed closely by policy making. Commissioners must have a working knowledge of government policies that their Department is required to enforce.

Research objective 4.

The purpose of Objective 4 was to identify the gaps between what Commissioners felt to be important leadership skills and how proficient they perceived themselves to be at those leadership skills.

The largest difference between perceived leadership skill importance and proficiency level occurred in the leadership area of technical skills. Commissioners rated the level of importance for the technical skills higher than their level of proficiency for the skills. The difference in the technical skill area was 11.06. The second largest leadership skill area gap which demonstrated the difference between importance and proficiency, was the human skills area (difference=7.00), followed by conceptual skills (difference=6.37), communication skills (difference=5.25), and emotional intelligence skills (difference=5.00). The leadership skills area with the smallest gap between self-perceived level of importance and self-perceived level of proficiency was the area of industry knowledge skills, having the lowest difference (difference=0.91). These findings therefore supported those found in Objective 2 and Objective 3 where Commissioners rated technical skills as *Least Important* of the six skill areas and rated themselves as *Least Proficient* at technical skills.

The gap in technical skills proficiency and technical skills importance is an important finding. Commissioners believe they are least able to perform at the needed level in the area of technical skills and are best able to understand the agricultural industry. The other skills areas have significant gaps between importance and ability levels. Though technical skills had the largest gap as well as ranked lowest in both proficiency and importance, Commissioners still discussed at length the importance and their working knowledge of budgeting and government policies. The researchers concluded that Commissioners view budgeting and government policies as challenging situations. Commissioners may have ranked themselves lower in the proficiency category simply because of the negativity associated with budgets and government policies. Although a gap exists, Commissioners

have the personnel put in place at the Department to handle the majority of the technical skills; while they focus on budgeting and policies.

Recommendations for Practice

This data highlights opportunities for youth programs like 4-H and FFA to enhance their programs and provide more targeted leadership experiences for youth. 4-H and FFA should evaluate their programs to ensure they are providing ample opportunities for youth to develop leadership skills that are directly related to being a voice for agriculture.

Commissioners noted that 4-H and FFA were important in the development of their leadership skills with an emphasis on communication, human, and conceptual skills. Thus, 4-H and FFA should conduct an in-depth analysis of their leadership development programs to ensure their programs are providing opportunities for youth to develop leadership skills and be a voice for agriculture. These youth leadership organizations should also continually evaluate their programs to ensure their respective programs are staying consistent in developing leaders for the agriculture industry, which is always changing and facing new challenges. They should also ensure programs are providing opportunities for youth to learn about national and international agriculture issues.

Universities should also provide formal and non-formal education programs to students that provide them with leadership development opportunities and knowledge about the current agriculture industry. Most Commissioners received undergraduate degrees in a field of agriculture. Colleges of agriculture at universities should evaluate their curriculum to ensure they are providing the proper education for future leaders in the agriculture field, not just addressing technical skills, but human, communication, and conceptual skills. Colleges

of agriculture should also provide non-formal opportunities for their students like leadership programs and networking opportunities for students. For instance, networking events could be offered that invite leaders of agriculture commodity groups and government leaders involved with agriculture issues. Colleges of agriculture should also work with their state's Commissioner to host events on campus that encourage leadership development.

Commissioners are willing to work with universities, thus, colleges of agriculture should take advantage of this opportunity.

The researcher also recommends universities recruit diverse populations in their colleges of agriculture. Most Commissioners are white males. Universities should reach out to diverse populations during the college admission process and during freshmen orientation by encouraging non-white, non-males to enroll in agriculture classes or majors.

The existing Commissioners attend a National Association of State Departments of Agriculture conference each year. In order to narrow the gaps identified in this study, the researcher recommends bringing in speakers to the conference related to the leadership skill areas. For instance, a state Department of Agriculture who is effectively utilizing technology could bring a speaker to discuss how other Departments can use technology and social media to reach their constituents.

Recommendations for Further Research

Commissioners participated in the leadership skills questionnaire and/or a phone interview during one point in time. Commissioners may perceive their leadership skills differently depending on particular situations or events, for instance, events happening in the Department or in their personal life. Future research should be conducted about the

environmental, personal, and situational variables that might influence leadership skills, which were not reported in this study.

Many differences existed between the elected and appointed Commissioners. Most of the appointed Commissioners had a strong relationship with the governor while the elected Commissioners did not. Future research should be conducted focusing on the differences in elected and appointed Commissioners in general but specifically in their relationship with the governor.

Commissioners mentioned significant life experiences, especially those involving family, during their young age as having an impact on their leadership skills. Future research should closely examine significant life experiences and family life as factors in developing leadership skills.

Commissioners were heavily involved in youth organizations like FFA and 4-H. Future research should be conducted to determine what organizations other government or business leaders were involved in at a young age. Further research should also be conducted about which aspects of youth organizations lead to the success of leaders in agricultural fields.

Lastly, further research should be conducted about the leadership skills instrument. Commissioners addressed social media and other types of technology during the phone interviews; however, the leadership skills instrument did not address these types of technologies. Thus, changes will most likely need to be made in order to keep up with the advances in technology.

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APPENDICES

Appendix A

Institutional Review Board Approval

North Carolina State University is a land-grant
university and a constituent institution of the
University of North Carolina

Office of Research and Innovation
Division of Research Administration

NC STATE UNIVERSITY

Campus Box 7514
Raleigh, North Carolina 27695-7514

919.515.2444 (phone)
919.515.7721 (fax)

From: Carol Mickelson, IRB Coordinator
North Carolina State University
Institutional Review Board

Date: September 6, 2011

Title: Leadership Competencies and Skills of Directors, Commissioners and Secretaries
of Agriculture

IRB#: 2197

Dear Ms. Baughman,

The research proposal named above has received administrative review and has been approved as exempt from the policy as outlined in the Code of Federal Regulations (Exemption: 46.101. b.3). Provided that the only participation of the subjects is as described in the proposal narrative, this project is exempt from further review.

NOTE:

1. This committee complies with requirements found in Title 45 part 46 of The Code of Federal Regulations. For NCSU projects, the Assurance Number is: FWA00003429.
2. Any changes to the research must be submitted and approved by the IRB prior to implementation.
3. If any unanticipated problems occur, they must be reported to the IRB office within 5 business days.

Please forward a copy of this letter to your faculty sponsor, if applicable. Thank you.

Sincerely,



Carol Mickelson
NC State IRB

Appendix B

Copy of Informed Consent Form

North Carolina State University

INFORMED CONSENT FORM for RESEARCH

Study Title: Leadership Competencies and Skills of Directors, Commissioners and Secretaries of Agriculture

Kristen N. Baughman
Principal Investigator

Dr. Jackie Bruce
Faculty Sponsor

What are some general things you should know about research studies?

You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. The purpose of research studies is to gain a better understanding of a certain topic or issue. You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher named above.

What is the purpose of this study?

The purpose of the study is to determine if Directors, Commissioners and Secretaries of Agriculture alter their leadership style when interacting with the public and policymakers; how controversial situations like budget crises might impact their leadership style; and to determine how well the vision of a Director, Commissioner or Secretary of Agriculture is communicated to his/her respective department of agriculture.

What will happen if you take part in the study?

If you agree to participate in this study, you will be asked to sign this consent form. In the event that you have any questions or concerns please call the researcher at 704-651-9019. Once all questions have been answered, sign the consent form and send a PDF of the signed consent form to knbaughm@ncsu.edu. You will then take part in an audio taped phone interview discussing your experiences as a Director, Commissioner or Secretary of Agriculture. After the interview is complete, the interview will be transcribed and all identifying information will be removed. I will then email the transcripts to you through a single private email address for member checking purposes. To do this I will need for you to provide me with a secure email address. After you check the transcripts you will let me know whether you approve/disapprove of their accuracy. Changes or clarifications could be made

to the transcripts if you would like. The interview should only take about an hour of your time, and the member check (review of interview transcript) should take about thirty minutes.

Risks

The risks associated with participating in this study are minimal.

Benefits

No promise or guarantee of benefits has been made to encourage you to participate. The data collected from you during this study will be used to determine the level of decision making, problem solving, team work, goal settings, and communication.

Confidentiality

The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely in locked desk drawer located in an office with a locked door and on a password protected computer. Only the principal investigator will have access to files and will know the participants. The audio recording device from the interview will be kept locked in a desk drawer and the transcription kept on the locked computer. To protect the privacy of others you are asked to not use the full names of other individuals. When the audio recording is transcribed, numbers will be used to for your name and for the names of any other individuals who you may have mentioned during the interview. The written research report will also use those numbers for participants instead of your actual names. No reference will be made in oral or written reports which could link you to the study. Upon completion of the study, all forms of data (recordings, paper and electronic copies of interview transcript, and consent form) will be erased or shredded promptly.

Compensation

For participating in this study you will not receive anything for participating.

What if you have questions about this study?

If you have questions at any time about the study or the procedures, you may contact the researcher, Kristen N. Baughman, at knbaughm@ncsu.edu , or 704-651-9019.

What if you have questions about your rights as a research participant?

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator, Box 7514, NCSU Campus (919/515-4514).

Consent To Participate

“I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled.”

Subject's signature_____ **Date** _____

Printed name_____

Investigator's signature_____ **Date** _____

Printed name_____

Should I have any questions about this study or its conduct, or participants' rights, I may contact:

Kristen N. Baughman, Principal Investigator

704-651-9019

knbaughm@ncsu.edu

Copy of Emails to be Sent to Potential Participants
(To be emailed before the phone interview)

Dear Potential Research Participant,

I am a graduate student in the Department of Agricultural and Extension Education in the College of Agriculture and Life Sciences working on a research project. As part of this project I am looking to gain an understanding of decision making, problem solving, team work, goal setting and communication as it may relate to your experiences during your term as Director, Commissioner or Secretary of Agriculture. To do this I am asking you to participate in questionnaire regarding your experiences as an elected or appointed official.

If you choose to participate in the study, your input could provide insight into how your leadership position can help develop and/or evolve leadership development for other agricultural leaders and youth. All responses to the questionnaire will remain confidential. Please read over the consent form and call me at 704-651-9019 in the event that you have any questions or concerns. Participation in this questionnaire is entirely voluntary and will only take about 10 to 20 minutes. You can access the questionnaire at the following link: *(include link from Qualtrics)*.

Again, I encourage you to take part in this research study but participation is strictly voluntary. All responses will be kept confidential and your connections to the responses anonymous.

Thank you for your time and consideration.

Kristen N. Baughman
Principal Investigator
North Carolina State University
Agricultural and Extension Education Graduate Student
knbaughm@ncsu.edu
704-651-9019

Dear Potential Research Participant,

I am a graduate student in the Department of Agricultural and Extension Education in the College of Agriculture and Life Sciences working on a research project. As part of this project I am looking to gain an understanding of decision making, problem solving, team work, goal setting and communication as it may relate to your experiences during your term as Director, Commissioner or Secretary of Agriculture. To do this I am asking you to participate in a phone interview regarding your experiences as an elected or appointed official.

If you choose to participate in the study, a phone interview will be performed. A time and date will be agreed upon prior to the interview. Participation in this interview is entirely voluntary and will only take about an hour. Your input could provide insight into how your leadership position can help develop and/or evolve leadership development for other agricultural leaders and youth. All responses to this interview will remain confidential. Please find an attached consent form and read over it. In the event that you have any questions or concerns please call me at 704-651-9019. Once all questions have been answered I will ask that you sign it and send a PDF of the signed consent form to me at knbaughm@ncsu.edu.

Again, I encourage you to take part in this research study but participation is strictly voluntary. All responses will be kept confidential and your responses will be reported as anonymous. Please let me know if you are willing to be interviewed.

Thank you for your time and consideration.

Kristen N. Baughman
Principal Investigator
North Carolina State University
Agricultural and Extension Education Graduate Student
knbaughm@ncsu.edu
704-651-9019

Copy of Reminder Email

Good afternoon,

Kristen Baughman is my intern at the North Carolina Department of Agriculture and Consumer Services. She is a productive member of our staff, and is also a graduate student at North Carolina State University in the Department of Agricultural and Extension working on her thesis. As part of her study she is looking to gain an understanding of decision making, problem solving, team work, goal setting and communication as it may relate to your experiences during your term as Director, Commissioner or Secretary of Agriculture. To do this I am asking you to participate in a questionnaire by October 1st regarding your experiences as an elected or appointed official. To access the survey please click this link: http://ncsu.qualtrics.com//SE/?SID=SV_6QB8qZk8sqMfVnC

I encourage you to take part in this research study. The questionnaire only takes ten minutes of your time, so I hope that you will participate. Thank you for your time and consideration, and willingness to help out my intern as she conducts research for her thesis.

Sincerely,
Commissioner Steve Troxler

Appendix C

Copy of Questionnaire

(Will appear electronically on the Qualtrics system)

Directors, Commissioners and Secretaries of Agriculture Leadership Skills Inventory

Thank you for agreeing to participate in this study. The intent of this study is to determine specific leadership skills Directors, Commissioners and Secretaries of Agriculture believe are important to their success. Additionally the research hopes to assess self-perceived proficiency levels in each of the leadership skill areas so that future professional development programs can be developed.

North Carolina State University INFORMED CONSENT FORM for RESEARCH

Study Title: Leadership Competencies and Skills of Directors, Commissioners and Secretaries of Agriculture

Kristen N. Baughman
Principal Investigator

Dr. Jackie Bruce
Faculty Sponsor

What are some general things you should know about research studies?

You are being asked to take part in a research study. Your participation in this study is voluntary. You have the right to be a part of this study, to choose not to participate or to stop participating at any time without penalty. The purpose of research studies is to gain a better understanding of a certain topic or issue. You are not guaranteed any personal benefits from being in a study. Research studies also may pose risks to those that participate. In this consent form you will find specific details about the research in which you are being asked to participate. If you do not understand something in this form it is your right to ask the researcher for clarification or more information. A copy of this consent form will be provided to you. If at any time you have questions about your participation, do not hesitate to contact the researcher named above.

What is the purpose of this study?

The purpose of the study is to determine if Directors, Commissioners and Secretaries of Agriculture alter their leadership style when interacting with the public and policymakers; how controversial situations like budget crises might impact their leadership style; and to determine how well the vision of a Director, Commissioner or Secretary of Agriculture is communicated to his/her respective department of agriculture.

What will happen if you take part in the study?

If you agree to participate in this study, you will be asked to sign this consent form and fill out the questionnaire. This questionnaire will only take about 10 to 20 minutes of your time. After you have completed the questionnaire please send the questionnaire and signed consent form to me without a return address or any identifiable information to:

Kristen Baughman
1120 Trinity Ridge Rd Apt 102
Raleigh, NC 27607

Risks

The risks associated with participating in this study are minimal.

Benefits

No promise or guarantee of benefits has been made to encourage you to participate. The data collected from you during this study will be used to determine the level of decision making, problem solving, team work, goal settings, and communication.

Confidentiality

The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely in locked desk drawer located in an office with a locked door and on a password protected computer. You will NOT be asked to write your name on any study materials so that no one can match your identity to the answers that you provide. Only the principal investigator will have access to files and will know the participants. No reference will be made in oral or written reports which could link you to the study. Upon completion of the study, all forms of data (copies of the questionnaire and consent form) will be erased or shredded promptly.

Compensation

For participating in this study you will not receive anything for participating.

What if you have questions about this study?

If you have questions at any time about the study or the procedures, you may contact the researcher, Kristen N. Baughman, at knbaughm@ncsu.edu , or 704-651-9019.

What if you have questions about your rights as a research participant?

If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Deb Paxton, Regulatory Compliance Administrator, Box 7514, NCSU Campus (919/515-4514).

Consent To Participate

“I have read and understand the above information. I have received a copy of this form. I agree to participate in this study with the understanding that I may choose not to participate

or to stop participating at any time without penalty or loss of benefits to which I am otherwise entitled. My submission of the completed questionnaire confirms my willingness to participate in this study.”

Should I have any questions about this study or its conduct, or participants’ rights, I know I may contact:

Kristen N. Baughman, Principal Investigator

704-651-9019

knbaughm@ncsu.edu

Please select YES if you wish you continue and give consent to participate in the questionnaire.

**Leadership Skills:
Importance and Self-Perceived Proficiency**

For each competency below, please rate the level of importance in the left-hand column and your current proficiency level in the right-hand column.

Level of Importance:

- NI = Not Important – (1)
- LI = Little Importance – (2)
- SI = Somewhat Important – (3)
- I = Important – (4)
- VI = Very Important – (5)

Level of Proficiency:

- N = No Proficiency – (1)
- BA = Below Average Proficiency – (2)
- AV = Average Proficiency – (3)
- AA = Above Average Proficiency – (4)
- VP = Very Proficient – (5)

Section 1. Human Skills

For each human skill competency below, please rate the level of importance in the left-hand column and your current proficiency level in the right-hand column.

Level of Importance					Human Skills	Level of Proficiency				
NI	LI	SI	I	VI		NP	BA	AV	AA	VP
1	2	3	4	5	1. identify personal strengths and weaknesses	1	2	3	4	5
1	2	3	4	5	2. evaluate the impact of personnel	1	2	3	4	5
1	2	3	4	5	3. respect others	1	2	3	4	5
1	2	3	4	5	4. create an environment in which you, as the leader are approachable	1	2	3	4	5
1	2	3	4	5	and open to new ideas	1	2	3	4	5
1	2	3	4	5	5. be an effective team member	1	2	3	4	5
1	2	3	4	5	6. environment that values the diversity of others	1	2	3	4	5
					7. create an environment in which team members are willing to share ideas					

Section 2. Conceptual Skills

For each conceptual skill competency below, please rate the level of importance in the left-hand column and your current proficiency level in the right-hand column.

Level of Importance					Conceptual Skills	Level of Proficiency				
NI	LI	SI	I	VI		NP	BA	AV	AA	VP
1	2	3	4	5	8. create a long term vision for the organization	1	2	3	4	5
1	2	3	4	5	9. think strategically	1	2	3	4	5
1	2	3	4	5	10. set goals	1	2	3	4	5
1	2	3	4	5	11. help others support organizational change	1	2	3	4	5
1	2	3	4	5	12. be decisive	1	2	3	4	5
1	2	3	4	5	13. attitude that supports and that welcomes organizational change	1	2	3	4	5
1	2	3	4	5	14. achieve goals	1	2	3	4	5

Section 3. Technical Skills

For each technical skill competency below, please rate the level of importance in the left-hand column and your current proficiency level in the right-hand column.

Level of Importance					Technical Skills	Level of Proficiency				
NI	LI	SI	I			NP	BA	AV	AA	VP
VI					15. develop budgets for all levels within the organization	1	2	3	4	5
1	2	3	4	5	16. effectively use computer software for word processing	1	2	3	4	5
1	2	3	4	5	17. interpret and explain organizational budgets	1	2	3	4	5
1	2	3	4	5	18. effectively use and search the internet	1	2	3	4	5
1	2	3	4	5	19. effectively use computer software for spreadsheets	1	2	3	4	5
1	2	3	4	5	20. effectively use computer software for databases	1	2	3	4	5
1	2	3	4	5	21. effectively integrate computer software program applications (i.e. merge files)	1	2	3	4	5

Section 4. Communication Skills

For each communication skill competency below, please rate the level of importance in the left-hand column and your current proficiency level in the right-hand column.

Level of Importance					Communication Skills	Level of Proficiency				
NI	LI	SI	I	VI		NP	BA	AV	AA	VP
1	2	3	4	5	22. interact and communicate with people who have divergent points of view	1	2	3	4	5
1	2	3	4	5	23. identify barriers to listening	1	2	3	4	5
1	2	3	4	5	24. write for various organizational purposes (i.e. technical writing, professional publications, etc.)	1	2	3	4	5
1	2	3	4	5	25. read and comprehend a wide range of publications	1	2	3	4	5
1	2	3	4	5	26. reduce barriers to listening	1	2	3	4	5
1	2	3	4	5	27. recognize and effectively use nonverbal cues or behaviors	1	2	3	4	5
1	2	3	4	5	28. write for various audiences	1	2	3	4	5

Section 5. Emotional Intelligence Skills

For each emotional intelligence skill competency below, please rate the level of importance in the left-hand column and your current proficiency level in the right-hand column.

Level of Importance					Emotional Intelligence Skills	Level of Proficiency				
NI	LI	SI	I	VI		NP	BA	AV	AA	VP
1	2	3	4	5	29. set priorities to effectively manage personal time	1	2	3	4	5
1	2	3	4	5	30. resolve conflict	1	2	3	4	5
1	2	3	4	5	31. make use of constructive criticism without becoming	1	2	3	4	5
1	2	3	4	5	critical and angry	1	2	3	4	5
1	2	3	4	5	32. separate personalities from behaviors	1	2	3	4	5
1	2	3	4	5	33. negotiate agreement	1	2	3	4	5
1	2	3	4	5	34. high level of motivation	1	2	3	4	5
1	2	3	4	5	35. control emotions in emotional situations	1	2	3	4	5
1	2	3	4	5	36. set priorities to effectively manage organizational time	1	2	3	4	5
					37. respect for the time commitments of others					

Section 6. Industry Knowledge Skills

For each industry knowledge skill competency below, please rate the level of importance in the left-hand column and your current proficiency level in the right-hand column.

Level of Importance					Industry Knowledge Skills	Level of Proficiency				
NI	LI	SI	I	VI		NP	BA	AV	AA	VP
1	2	3	4	5	38. create linkages within both traditional and non-traditional audiences	1	2	3	4	5
1	2	3	4	5	39. depth of knowledge in a content area	1	2	3	4	5
1	2	3	4	5	40. identify the needs of various client groups within the state	1	2	3	4	5
1	2	3	4	5	41. explain the political environment of the state and the implications for the Department of Agriculture	1	2	3	4	5
1	2	3	4	5	42. relationship between statewide programs (i.e. role of various agencies in the delivery of programs)	1	2	3	4	5
1	2	3	4	5	43. evaluate the impact of programs for each client group	1	2	3	4	5
1	2	3	4	5	44. being able to explain the founding principles of the Department of Agriculture with constituents	1	2	3	4	5

Section 7. Demographic Information

Please complete the following information.

1. What is your gender?
 - Female
 - Male

2. What is your ethnicity?
 - American Indian or Alaska Native
 - Asian
 - Black or African American
 - Hawaiian or Pacific Islander
 - Hispanic or Latino
 - White
 - Other (please indicate) _____

3. What is your age (in years)? _____

4. Please indicate your current job title:

5. In the spaces below, please indicate all academic degrees held, major and minor if applicable.

Degree	Major	Minor

6. How long have you been employed with the Department? _____

7. How long have you been in your current role? _____

**Please use the space below to address anything that you believe has not been addressed in regards to leadership skills.
Thank you for your participation!!!**

Appendix D

Copy of Interview Protocol

Protocol: Leadership Skills of Directors, Commissioners and Secretaries of Agriculture
Kristen N. Baughman

Introduction:

Thank you, [name] for taking the time to come today. I really appreciate it.

In interviewing you, I would like to learn about your experiences as the Commissioner, Director or Secretary of Agriculture.

Establishing rapport---I am an intern for Commissioner Troxler in North Carolina. I really enjoy working for the NC Department of Agriculture and Consumer Services.

So, have you taken part in a research interview before?

I have planned for this interview to take about an hour, and I look forward to what you have to say!

Okay. Well, I have a number of questions that I will ask you about your experiences, and I would like you to describe your experiences as best you can. I want to emphasize that I'm interested in learning about your experiences. There are no right or wrong answers.

I have received your consent form outlining your rights as an interviewee for our interview today. *Mention transcription and member checking.* Is there anything I can clarify for you?

During the interview, I will be taking notes. I use it as a way to remember points that I can follow up with you about later in the interview. I will also ask questions to guide our discussion, but I'm very interested in what you have to say. Do you have any questions?

Okay, let's begin recording!

Questions:

1. Tell me about your leadership experience at the [state] Department of Agriculture.

- a. Probes—
 - i. [If an elected official] Why did you decide to run for your position?
 1. Who encouraged you to participate?
 - ii. How long have you been in your position?
 - iii. How does it feel to be a part of the [state] Department of Agriculture?
 - iv. What are some good and/or bad experiences you have had while serving as a leader?
 - v. Tell me about the events and/or programs you get to participate in because of your leadership in the state?
 - b. Looking for decision making, role models, motivation, problem solving, teamwork and communication.
2. How did you get to the position you are in today? Did past leadership roles play any part of the decision to become a Commissioner, Director or Secretary of Agriculture? How so?
 - a. Probes—
 - i. Describe your career path.
 - ii. Describe your participation in past leadership positions.
 - iii. Tell me about leadership training that you have had in the past five years.
 - iv. Tell me about other leadership training that you have received from high school to present that you believe assisted you in your present position.
 - b. Looking for—reference to preparation, confidence, and level of skill development from serving in past leadership positions.
 3. Tell me about your interactions with other employees at the [state] Department of Agriculture.
 - a. Probes—

- i. Describe how you interact with your co-workers while at the [state] Department of Agriculture.
 1. Who do you interact with the most and why?
 - ii. Describe how you interact with your co-workers while outside of the [state] Department of Agriculture.
 - iii. Describe how you interact with your co-workers that are involved in your organization.
 - b. Looking for: references to the impact of personnel, decision making, respect and teamwork.
4. Tell me about your interactions with other officials outside of the [state] Department of Agriculture.
 - a. Probes—
 - i. Describe how you interact with them at meetings.
 - ii. Describe how you interact with them at events.
 - iii. What types of people do you interact with?
 - iv. How do you and the officials interact with each other?
 - b. Looking for: leadership positions, positive and negative experiences.
5. Tell me about your interactions with [state] residents outside of the [state] Department of Agriculture.
 - a. Probes—
 - i. Describe how you interact with them in public.
 - ii. Describe how you interact with them at events.
 - iii. What types of people do you interact with?
 - iv. How do you and the public directly interact with each other?

- b. Looking for: leadership positions, positive and negative experiences.
- 6. Tell me about a time you had to make a big decision.
 - a. Probes—
 - i. What factors help you make decisions?
 - ii. What do you consider before making a decision?
 - b. Looking for: references to looking for information to understand problem, considering risks, past choices to influence new decisions and role models.
- 7. When you have a problem or issue that you have to address, how do you go about it?
 - a. Probes—
 - i. Tell me about your thought process.
 - ii. Walk me through a time when you had to think something through.
 - iii. Did past leadership experiences make critical thinking easier? Please describe.
 - b. Looking for: references to ease in expression of thought, comparisons, and confidence.
- 8. Tell me about how you communicate with others.
 - a. Probes—
 - i. What do you believe is effective communication?
 - 1. How does that happen?
 - ii. As a government leader, where did you use communication skills? Did your skills change or evolve over time?
 - 1. Tell me how.
 - b. Looking for: different communication styles and points of view

9. What are your main goals for yourself and the [state] Department of Agriculture? Tell me how you set those goals.
 - a. Probes—
 - i. How do you achieve your goals?
 - ii. As a government leader, is goal setting necessary? Tell me more about that.
 - b. Looking for: planning, progression, and feedback
10. Imagine and describe an ideal Department of Agriculture.
 - a. Probes—
 - i. Describe how your ideal organization functions.
 - ii. Describe how your ideal organization communicates.
 - iii. Who would be involved in your ideal organization?
 - b. Looking for—communication skills, organizational climate and leadership styles.
11. This concludes the questions to the interview. Now, there is some demographic information I would like to get from you.
 - a. What is your age?
 - b. What is your ethnicity?
 - i. Choices: Caucasian, African American, Asian, Hispanic, American Indian, other.
 - c. What is your gender?
 - d. What state are you from?
 - e. Please choose an area that describes where you grew up:
 - i. Farm
 - ii. Country under 500 people
 - iii. Small town with 500-1,500 people

- iv. Suburbs with 1,500-3,000 people
- v. City with 3,000-10,000 people
- vi. Metropolis with over 10,000 people

Are there any questions or additional comments you would like to bring up?

As we talked about earlier, I will have this interview transcribed and email it to you to review. All identifying information will be removed from transcripts prior to emailing them to a single private email address for member checking purposes. Send an email back to me letting me know if any corrections were made and if you accept the transcript as a fair representation of our discussion today.

Thank you so much for your time and input. By participating in this study, you will help to determine a better understanding about the leadership skills and competencies of Commissioners, Directors and Secretaries of Agriculture. I will be in contact with you soon.

Appendix E

**PEER DEBRIEF 1:
Leadership Competencies and Skills of Directors, Commissioners and Secretaries of
Agriculture**

To: Dr. Bruce

From: Kristen Baughman

Subject: Research- Findings in the Research Thus Far

Date: October 18, 2011

- 1) Research Update
 - a) Interviewed three participants
 - i) Gender: all male
 - ii) Age: 84, 60, and 63
 - iii) Ethnicity: all Caucasian
 - iv) States represented: Two from the South, one from Midwest
 - v) Town: all from farms
 - vi) Two were appointed to their position, one was elected
 - vii) Two just started in their position in January, one had served for 11, 4-year terms
- 2) Interviews
 - a) Structure: all phone interviews
 - b) Time: all of the interviews lasted for about one hour
 - c) Place
 - i) All occurred while I was at my apartment
 - d) Field Notes: taken during each interview and used for transcriptions
 - e) Recording device: used during each interview and used for transcriptions

3) Synthesis of Interview Content

- a) Similarities existed between the participants
- b) Differences existed between the participants
- c) There are three dramatic differences between the elected official and the two appointed officials
- d) Fourteen trends existed

4) Listing of Trends

- a) The Department of Agriculture is a “family” atmosphere - Human
 - i) The organization’s members become like “family” and provide the leader with social fulfillment. They are able to socialize with and rely on the other members of the organization. Two of the participants used this word; the other did not use the word but stated how close he and his employees are at the Department.
- b) Past leadership experiences
 - i) All of the leaders held a significant leadership position (or multiple) within their community for years in the agriculture industry before becoming Commissioner or Secretary. Example: Farm Bureau, Corn Growers, Boy Scouts, etc.
 - ii) All of the leaders were motivated by the organizations they were serving in at the time to run for Commissioner or go through the interview process to be appointed as Secretary.

- iii) All of the leaders grew up on a farm and feel they can relate to their constituents because of their past experiences on the farm.
 - iv) Two of the leaders held positions at a higher level within their FFA or 4-H organizations.
 - v) Their parents held significant leadership experiences involving public service. One leader's father was the county's sheriff, the other leader's father was a legislature in his state and his mother was President of a beef cattle group in the community.
- c) Leadership experiences while serving in the Department
- i) The most tenured official mentioned holding positions within SASDA and NASDA. They all still hold positions in other national or local organizations while serving as Commissioner or Secretary.
- d) Staying current in the industry – Industry
- i) Each participant felt it was important to have a depth of knowledge about the agricultural industry. Their knowledge came from their experiences on the farm as well as from reading about the current issues in agricultural.
- e) Recognizing the rural/farm industry – Industry
- i) All participants feel that their main goal is to bring recognition from their state's residents to the rural/farm industry. They believe that it should be promoted in their state because it is either the number one industry or a top industry.
- f) Technology - Technical

- i) All participants feel that they must take the initiative to use technology, or hire people that know how to effectively use technology. Two participants mentioned the use of social media in their Department.
- ii) Email is the most common method of communication for each leader.
- g) Budgets – Technical
 - i) All participants believe that it is important to understand their Department’s budget and the history of their budget. Every Department’s budget was cut this year, and had been facing cuts for many years before.
- h) Listening to different points of view - Communication
 - i) Each of the participants noted that they always took both sides of a situation into consideration before making large decisions. They encourage their employees, other leaders in the state, and the state residents to come to them with their opinions/beliefs.
- i) Most frequent interactions - Communication
 - i) All of the participants stated that their most frequent interactions on a day-to-day basis are the administrative staff within their office, like their administrative assistants and assistant commissioners.
- j) Networking - Communication
 - i) Each participant noted the importance of networking. They each know people from their state no matter where they go. Having contacts is highly important in order to achieve goals.
- k) Long-term vision – Conceptual

- i) Each participant stated their vision for their Department of Agriculture. They all mentioned preserving the farm/rural areas in their state and continuing to make agriculture a productive industry.
- l) State government
 - i) The leaders feel that by working in state government you have to have a “public service” attitude.
 - ii) The leaders feel that working in state government is challenging due to the budget cuts and rules. They find it difficult to create new jobs in their Departments or change existing rules.
- m) Value of diversity – Human
 - i) Each participant values diversity within their Department and within their state. They want to have a variety of people employed at the Department of Agriculture. They also want diverse views to exist in their state about agriculture.
- n) Recognize their personality - Emotional
 - i) All of the leaders recognize that they can be stubborn at times and have their own opinions about each situation. They recognize that they cannot always voice their opinions in a strong manner.
- 5) Differences
 - a) Frequent interactions- Communication

- i) The two appointed officials included the governor in their most frequent interactions, whereas the elected official does not communicate often with the governor.
- b) Voicing opinions - Communication
 - i) Two of the appointed officials feel that they are being scrutinized by the governor's office and have to be careful about what they say. They value their relationship with the governor and do not want to make the governor look bad. The elected official is more open in voicing his opinion and does not mind getting into trouble every now and then.
- c) View of technology - Technical
 - i) The two appointed officials are younger than the elected official and placed a great emphasis on technology and the importance of adopting new technology in their Department.
- 6) Dramatic Differences
 - a) Appointed vs. Elected leaders
 - i) The elected leader had served in office for 11, 4-year terms. The other two leaders had been appointed and had been in office since January 2011. The elected official had built contacts internationally, whereas the appointed officials did not mention this because they are still trying to build contacts across their state.
 - ii) The elected leader feels strongly that the Commissioner or Secretary should be elected; it should be the people's choice. He feels that appointed officials

are not always working for the people, more for the governor. The appointed leaders feel that the Commissioner or Secretary should be appointed because the governor seeks out the most qualified person in their state.

iii) The appointed officials have a better relationship with the governor. They look up the governor and report directly to the governor's office. They continually bring up the governor during their interviews, whereas, the elected leader views the governor negatively. He feels that the governor appoints leaders because of a hidden objective. For instance, that person eventually wants to run for another leadership position within the state and does not necessarily want to work for the rural and farming people in his or her state.

**PEER DEBRIEF 2:
Leadership Competencies and Skills of Directors, Commissioners and Secretaries of
Agriculture**

To: Dr. Bruce

From: Kristen Baughman

Subject: Research- Findings in the Research Thus Far

Date: October 25, 2011

- 1) Research Update
 - a) Interviewed three participants (two Secretaries, one Director)
 - i) Gender: all male
 - ii) Age: 56, 55, and 35
 - iii) Ethnicity: all Caucasian
 - iv) States represented: Two from the Northeast, one from Midwest
 - v) Town: all from farms, one had left the farm and moved to different places throughout the state
 - vi) All three were appointed
 - vii) Length of term: 2 years, 10 months, and 5 years
- 2) Interviews
 - a) Structure: all phone interviews
 - b) Time: two interviews lasted for about one hour, one interview lasted for about 45 minutes
 - c) Place
 - i) All occurred while I was at my apartment
 - d) Field Notes: taken during each interview and used for transcriptions

- e) Recording device: used during each interview and used for transcriptions
- 3) Synthesis of Interview Content
- a) Similarities existed between the participants
 - b) Differences existed between the participants
 - c) There are two dramatic differences between the leaders
 - d) Thirteen trends existed
- 4) Listing of Trends
- a) The Department of Agriculture is a great atmosphere - Human
 - i) The organization's members provide the leader with social fulfillment. They are able to socialize with and rely on the other members of the organization.
 - b) Past leadership experiences
 - i) All of the leaders were motivated by the organizations they were serving in at the time to go through the interview process to be appointed as Secretary or Director.
 - ii) All of the leaders lived or still live on a farm and feel they can relate to their constituents because of their past and present experiences on the farm.
 - iii) The leaders mentioned high school and college experiences as being significant. One of the leaders held a position at a higher level in both the FFA and 4-H organizations.
 - c) Staying current in the industry – Industry

- i) Each participant felt it was important to have a depth of knowledge about the agricultural industry. Their knowledge came from reading about the current issues in agriculture and from talking with agriculture groups.
- d) Motivation – Emotional
 - i) All of the participants are self-motivated and understand this about their personality. They seek out opportunities and have a passion for their job.
- e) Recognizing the rural/farm industry – Industry
 - i) All participants want agriculture to be promoted in their state because it is either their number one industry or a top industry.
 - ii) All participants want agriculture to stay current with the changing climate and demands to be environmentally friendly.
- f) Technology - Technical
 - i) All participants feel that they must take the initiative to use technology. One mentioned the increase in text messages that he sends.
 - ii) All of the participants mentioned the use of social media in their Department. Examples: Twitter and Facebook.
 - iii) Email is the most common method of communication for each leader.
- g) Budgets – Technical
 - i) All participants believe that it is important to understand their Department's budget and wish they had more money to spend on agricultural programs in their state.
- h) Listening to different points of view - Communication

- i) Each of the participants noted that they always took both sides of a situation into consideration before making large decisions. They turn to other government leaders and agricultural groups in the state, as well as the state residents regarding their opinions/beliefs.
- i) Most frequent interactions - Communication
 - i) All of the participants stated that their most frequent interactions on a day-to-day basis are with their Division Directors.
 - ii) All of the participants mentioned interacting with the governor and his/her office frequently.
 - iii) All of the participants mentioned interacting with other Departments within their state. Example: Department of Tourism or Department of Motor Vehicles.
- j) Long-term vision – Conceptual
 - i) Each participant stated their vision for their Department of Agriculture. They all mentioned continuing to make agriculture a productive industry and keeping up with the environmental demands.
- k) State government
 - i) The leaders feel that working in state government is challenging due to the budget cuts and rules. There are many rules and regulations that must be followed by their state’s farmers and the Department of Agriculture must help to enforce these rules and regulations.
- l) Interactions with citizens of the state – Communication

- i) The leaders feel that they interact with the citizens of their state the most during meetings and visits to fairs/festivals, which requires a lot of traveling.
 - ii) All of the interactions are positive with the citizens of their state. None of the leaders mentioned having an extremely negative interaction with a citizen.
 - m) Value of diversity – Human
 - i) Each participant values diversity in their state, they want diverse views to exist in their state about agriculture.
- 5) Differences
- a) View about environmental issues
 - i) One leader did not mention farming as often as the other two leaders during his interview. He was more concerned with environmental issues and their impact on the state’s agriculture industry; this was the focus of his interview.
 - b) Past leadership experiences
 - i) Two of the leaders held a significant leadership position (or multiple) within their community for years in the agriculture industry before becoming Secretary or Director. Example: Farm Bureau or an assistant position within their Department of Agriculture. One of the leaders held significant leadership positions within government, not in the agricultural field.
- 6) Dramatic Differences
- a) Connection to the governor
 - i) The two leaders who held positions in agriculture were encouraged to submit their name and were sought out to be the Secretary or Director of Agriculture.

The other leader who held positions in government was appointed by a governor who has been his friend for 22 years.

b) Farming background

- i) Two of the participants still live on a farm and the farms have been in their family for many generations. The other participant mentioned he had farming experience, but did not mention farming and his agricultural background throughout the interview like the other participants (this participant is the one who has known the governor for 22 years).

**PEER DEBRIEF 3:
Leadership Competencies and Skills of Directors, Commissioners and Secretaries of
Agriculture**

To: Dr. Bruce

From: Kristen Baughman

Subject: Research- Findings in the Research Thus Far

Date: November 5, 2011

1) Research Update

- a) Interviewed three participants (one Director, two Commissioners)
 - i) Gender: all male
 - ii) Age: 70, 49, and 40
 - iii) Ethnicity: all Caucasian
 - iv) States represented: Two from South, one from Midwest
 - v) Town: all grew up on a farm
 - vi) Two were appointed, one was elected
 - vii) Length of term: 1.5 years, 1 year, 6.5 years

2) Interviews

- a) Structure: all phone interviews
- b) Time: three interviews lasted for about one hour
- c) Place
 - i) All occurred while I was at my apartment
- d) Field Notes: taken during each interview and used for transcriptions
- e) Recording device: used during each interview and used for transcriptions

3) Synthesis of Interview Content

- a) Similarities existed between the participants

- b) Differences existed between the participants
 - c) There is one dramatic difference between the leaders
 - d) Twelve trends existed
- 4) Listing of Trends
- a) Past leadership experiences
 - i) All of the leaders were motivated by the organizations they were serving in at the time to go through the process to be appointed as Director or Commissioner.
 - ii) All of the leaders lived or still live on a farm and feel they can relate to their constituents because of their past and present experiences on the farm.
 - iii) The leaders mentioned high school and college experiences as being significant. All of the leaders held positions in 4-H or FFA. All of the leaders served in leadership positions within these organizations.
 - b) Technology - Technical
 - i) All participants feel that they must take the initiative to use technology. All of the leaders use Facebook and Twitter, and the use of social media in their Department is important.
 - c) The Department of Agriculture is a great atmosphere - Human
 - i) The organization's members provide the leader with social fulfillment. They are able to socialize with and rely on the other members of the organization.
 - ii) Leaders make an effort to get to know their employees. Ex: Brown bag lunch program from transcription 8.

- d) Budgets – Technical
 - i) All participants believe that it is important to understand their Department’s budget and wish they had more money to spend on agricultural programs in their state.
 - ii) The budgets have been the most challenging part of their jobs. One leader mentioned the budgets have negatively impacted his Department.
- e) Listening to different points of view - Communication
 - i) Each of the participants noted that they always took both sides of a situation into consideration before making large decisions. They turn to other government leaders and agricultural groups in the state.
 - ii) The leaders are open to hearing their state residents’ opinions/beliefs.
- f) Motivation – Emotional
 - i) All of the leaders have a passion for their job.
 - ii) All of the leaders feel strongly about the agriculture industry and have an emotional attachment to agriculture. They all grew up on farms and participated in organizations related to the industry.
- g) Staying current in the industry – Industry
 - i) Their knowledge came from reading about the current issues in agriculture and from talking with agriculture groups.
 - ii) Their knowledge also came from their employees, they are the most beneficial and often are viewed as the “brains” behind the Department of Agriculture.
- h) Recognizing the rural/farm industry – Industry

- i) All participants want agriculture to stay current with the changing climate and demands to be environmentally and animal “friendly.”
- i) Most frequent interactions - Communication
 - i) All of the participants stated that their most frequent interactions on a day-to-day basis are with their Division Directors or executive staff.
 - ii) Participants mentioned interacting with other Departments within their state.
- j) Long-term vision – Conceptual
 - i) Each participant stated their vision for their Department of Agriculture. They all mentioned continuing to make agriculture a productive industry and balancing the budget.
- k) State government
 - i) The leaders feel that working in state government is challenging due to the budget cuts and rules. They wish they had more money to employ more people in the Department.
 - ii) One Commissioner mentioned that working in the state government is challenging because the Department must respond immediately to disasters.
Ex: Tornadoes.
- l) Interactions with citizens of the state – Communication
 - i) Their job mainly consists of traveling. The leaders feel that they interact with the citizens of their state the most during meetings and visits to fairs/festivals, which requires a lot of traveling around their state.

- ii) The interactions are positive with the citizens of their state. No leader mentioned a negative interaction.
- 5) Differences
- a) View about the governor
 - i) One appointed leader mentioned he must make sure he is on the governor's side when speaking about agriculture issues, and this can be challenging. He does not always agree with the governor and has to learn to think before he speaks.
 - ii) The other appointed leader did not mention any challenging or negative interactions. He and the governor are close friends and communicate frequently.
 - iii) The elected leader works closely with the governor's cabinet and viewed the governor in a positive light.
 - b) Communicating with the governor
 - i) Those participants who were appointed mentioned interacting with the governor and his/her office more frequently than the Commissioner who was elected.
 - c) Past leadership experiences
 - i) Two of the leaders held a significant leadership positions either at the national or state level within the agriculture industry before becoming Director or Commissioner.

- ii) Two leaders were involved previously with state government, one leader was the head of another state agency; one was involved on the legislature. The leader who was involved in the legislature had been involved with campaigns and had an interest in government since a young age.
- 6) Dramatic Difference
- a) Desire to become Commissioner or Director of Agriculture
 - i) One of the leaders had a drive and desire to become Commissioner in his teenage years.
 - ii) The other two leaders did not have this drive at a young age; they were in the right place at the right time.

PEER DEBRIEF 4:
**Leadership Competencies and Skills of Directors, Commissioners and Secretaries of
Agriculture**

To: Dr. Bruce

From: Kristen Baughman

Subject: Research- Findings in the Research Thus Far

Date: November 12, 2011

1) Research Update

a) Interviewed three participants

i) Gender: two male, one female

ii) Age: 55, two were 60

iii) Ethnicity: all Caucasian

iv) States represented: One from West, one from North East, and one from South

v) Town: two from farms, one from suburbs

vi) Two were appointed to their position, one was elected

vii) One has served for 7 years, one took office in Feb. 2011, and one has served
for 3 years

2) Interviews

a) Structure: all phone interviews

b) Time: all of the interviews lasted for about one hour

c) Place

i) All occurred while I was at my apartment

d) Field Notes: taken during each interview and used for transcriptions

e) Recording device: used during each interview and used for transcriptions

3) Synthesis of Interview Content

- a) Similarities existed between the participants
 - b) Differences existed between the participants
 - c) There are three dramatic differences between the elected official and the two appointed officials
 - d) Fifteen trends existed
- 4) Listing of Trends
- a) Networking - Communication
 - i) Each participant noted the importance of networking. They always try to meet new people when traveling and stay in contact with many agriculture organizations as possible.
 - b) The Department of Agriculture is a “family” or close atmosphere - Human
 - i) One Commissioner used the word family; the other two mentioned how they are close to some of the employees.
 - c) Past leadership experiences
 - i) All of the leaders held a significant leadership position (or multiple) within their community for years in the agriculture industry before becoming Commissioner. Ex: Farm Bureau, Dairy Industry, Cooperative Extension, USDA.
 - d) Fell into the position and were motivated.
 - i) All of the leaders were motivated by their community or organizations they were serving in at the time to serve in or run for the Commissioner position.

Ex: farmers involved with Cooperative Extension, members of Farm Bureau, Secretary and the employees at the USDA.

- ii) None of the Commissioners mentioned every having a desire to serve in the position, they were in the right place at the right time. They were motivated to serve their community.
- e) Staying current in the industry – Industry
 - i) Each participant felt it was important to have an understanding about agriculture. Their knowledge comes from previous organizations associated with agriculture (Ex: USDA, Extension, or Farm Bureau).
- f) Agriculture experience – Industry
 - i) All of the participants have worked or managed a farm. They have a wide range of knowledge about agriculture.
- g) Recognizing the farm industry – Industry
 - i) All participants mentioned how agriculture should be promoted in their state and mentioned their marketing programs.
- h) Budgets – Technical
 - i) All participants believe that it is important to understand their Department's budget and how to handle budget cuts positively and involve the key players.
- i) Challenges with state government
 - i) The leaders feel that working in state government is challenging due to the budget. They find it challenging when budgets are cut to reorganize their Department and the employees.

- j) Technology - Technical
 - i) All participants feel that their Department must effectively use technology.
All participants mentioned the use of social media in their Department.
 - ii) None of the participants actually use social media. One is thinking about making a Twitter account.
- k) Decision-making and listening to different points of view - Communication
 - i) Each of the participants noted that they always took both sides of a situation into consideration before making large decisions. They look at the facts and also confide in their close circle of staff members or family members depending on the decision.
- l) Value of diversity – Human
 - i) Each participant values diversity within their Department and within their state. They try to listen to the diverse views existing in their state about agriculture.
- m) Most frequent interactions - Communication
 - i) All of the participants stated that their most frequent interactions are the staff within their office, like their administrative assistants, assistant commissioners, and Division Directors.
- n) Focus on the farmers
 - i) Each Commissioner mentioned their main goals are to focus on the future of the farmers or ranchers in their state.
- o) Long-term vision – Conceptual

- i) Each participant stated their vision for their Department of Agriculture. They all mentioned how they want the Department to be prepared to take on the future.
- 5) Differences
- a) Size of the state influences interactions – Communication
 - i) One Commissioner serves in a small state and feels that people know him and often “abuse” this privilege. One Commissioner serves in one of the largest states and tries to meet as many citizens as possible by engaging in meetings and panels across the state.
 - b) Significant life experiences
 - i) One Commissioner mentioned losing her mother at an early age, which helped her a lot in preparing her to be a leader. One Commissioner mentioned his father’s Alzheimer’s playing a large role in his decision to serve in the position. The other Commissioner did not mention a significant life experience.
 - c) Experiences with FFA and 4-H
 - i) Two Commissioners participated in 4-H; one did not participate in FFA because it was not offered and did not have a desire to participate in 4-H.
 - d) Frequent Interactions- Communication
 - i) The two appointed officials interact frequently with the governor, whereas the elected official does not communicate as often with the governor.
 - e) Interactions with the governor and his/her cabinet - Communication

- i) Two of the appointed officials value their relationship with the governor and feel their interactions with the governor's cabinet are important. The elected official does not mention interacting with the governor and his/her cabinet in the interview.
- 6) Dramatic Differences
- a) Appointed vs. Elected leaders
 - i) The elected leader has a bold personality. He feels he has an excellent reputation and serves as a credible voice in his state, which is why he has been re-elected. The appointed leaders are more humble and gracious that the governor has asked them to serve in the position.
 - ii) The elected leader is more experienced than the appointed leaders. The elected leader does not focus on the operations of the Department as much; rather he focuses on the state's citizens and farmers. The appointed leaders mention this same focus, but are more concerned with the daily operations.
 - iii) The appointed officials have a better relationship with the governor. They look up the governor and have interactions on a frequent basis with the cabinet members. They continually bring up the governor during their interviews, whereas, the elected leader does not.

**PEER DEBRIEF 5:
Leadership Competencies and Skills of Directors, Commissioners and Secretaries of
Agriculture**

To: Dr. Bruce

From: Kristen Baughman

Subject: Research- Findings in the Research Thus Far

Date: November 25, 2011

1) Research Update

a) Interviewed three participants (one Director, two Commissioners)

i) Gender: all male

ii) Age: 53, 67, 61

iii) Ethnicity: all Caucasian

iv) States represented: One from South, two from Midwest

v) Town: all grew up on a farm

vi) Two were appointed, one was elected

vii) Length of term: 4 years in the past and started again in January 2011, one started in December 2010, and the other has served for 10 months.

2) Interviews

a) Structure: all phone interviews

b) Time: three interviews lasted for about one hour

c) Place

i) All occurred while I was at my apartment

d) Field Notes: taken during each interview and used for transcriptions

e) Recording device: used during each interview and used for transcriptions

- 3) Synthesis of Interview Content
 - a) Similarities existed between the participants
 - b) Differences existed between the participants
 - c) Two dramatic differences existed between the leaders
 - d) Thirteen trends existed
- 4) Listing of Trends
 - a) Agriculture knowledge – Industry
 - i) All of the leaders lived or still live on a farm and can relate to their constituents because of their experiences on the farm.
 - b) Past leadership experiences
 - i) All of the leaders were motivated by the organizations they were serving in at the time to go through the process to be appointed or elected (Ex: Agribusiness Council,
 - c) Technology - Technical
 - i) Two participants feel that their Departments must use technology. The use of social media in their Department is important (Ex: Facebook, Twitter, YouTube).
 - d) Collaborative atmosphere - Human
 - i) The Commissioners make an effort to get to know their employees. They walk around the Department and show they are interested in their employees and encourage collaboration/open-door policy.
 - e) Budgets – Technical

- i) All participants believe that it is important to understand their Department's budget, this is a challenging aspect of their job.
- f) Listening to different points of view - Communication
 - i) Each of the participants noted that they always took both sides of a situation into consideration before making large decisions. They must figure out who the decision will impact.
- g) Motivation – Emotional
 - i) All of the leaders have an emotional attachment to agriculture. They all grew up on farms and participated in organizations related to the industry, they are motivated to serve in this industry.
- h) Staying current in the industry – Industry
 - i) Their knowledge came from learning about the current issues in agriculture.
 - ii) They make an effort to discuss issues and communicate with other agriculture groups.
- i) “Reacting” Department
 - i) Two of the leaders mention that their Departments react to significant issues. They desire for their Department to be ready to tackle an issue.
- j) Recognizing the rural/farm industry – Industry
 - i) All participants want agriculture to stay current, they focus largely on their Department's agricultural marketing programs.
- k) Most frequent interactions - Communication

- i) All of the participants stated that their most frequent interactions on a day-to-day basis are with their executive staff.
 - ii) Participants mentioned interacting with other Departments within their state.
 - iii) Participants mentioned interacting with the governor and his/her cabinet.
- l) State government
 - i) The leaders feel that working in state government is challenging due to the budget cuts.
- m) Interactions with citizens of the state – Communication
 - i) Their job mainly consists of traveling. The leaders feel that they interact with the citizens of their state the most during meetings and visits to fairs/festivals, which requires a lot of traveling around their state.
 - ii) The interactions are positive with the citizens of their state. No leader mentioned a negative interaction.
- 5) Differences
 - a) Religion
 - i) One Commissioner mentions praying about issues when making big decisions and how religion is significant to his job. The others do not mention religion.
 - b) Significant life experience
 - i) One Commissioner mentioned his dad's health failure as a major reason why he went back to the farm instead of pursuing another leadership role at the time. The others do not mention a significant life experience.
 - c) Past leadership experiences

- i) Two of the leaders held a significant leadership positions at the state level within the agriculture industry before becoming Commissioner.
 - ii) Two leaders were involved previously with state government, one as a Senator and one as speaker of the House.
- 6) Dramatic Difference
- a) Past leadership during high school
 - i) One leader was state president of FFA, and one leader was highly involved with 4-H and FFA. One mentioned how 4-H was the reason why he wanted to get involved with serving the public.
 - ii) One leader mentioned he was a “reluctant” leader and did not participate in anything during high school.
 - b) Experience at the Department of Agriculture
 - i) One Commissioner had served previously at the Department of Agriculture. The experience allowed him to better understand the functions of the Department, whereas the new leaders are still learning these areas.

Appendix F
AUDIT TRAIL

Audit Coded Bibliography
In Chronological Order of Interview

1. I1 .M Current Commissioner of Agriculture, interviewed October 11, 2011
2. I2 .M Current Commissioner of Agriculture, interviewed October 12, 2011
3. I3.M Current Commissioner of Agriculture, interviewed October 17, 2011
4. I4.M Current Commissioner of Agriculture, interviewed October 18, 2011
5. I5.M Current Commissioner of Agriculture, interviewed October 20, 2011
6. I6.M Current Commissioner of Agriculture, interviewed October 24, 2011
7. I7.M Current Commissioner of Agriculture, interviewed October 25, 2011
8. I8.M Current Commissioner of Agriculture, interviewed October 28, 2011
9. I9.M Current Commissioner of Agriculture, interviewed October 31, 2011
10. I10.M Current Commissioner of Agriculture, interviewed November 4, 2011
11. I11.M Current Commissioner of Agriculture, interviewed November 7, 2011
12. I12.F Current Commissioner of Agriculture, interviewed November 8, 2011
13. I13.M Current Commissioner of Agriculture, interviewed November 18, 2011
14. I14.M Current Commissioner of Agriculture, interviewed November 21, 2011
15. I15.M Current Commissioner of Agriculture, interviewed November 22, 2011