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Perceptions of Agricultural Leadership Academic Programs of 1862 Land-Grant Universities

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Abstract

This study characterized perceptions of agricultural leadership programs in colleges of agriculture, food, life, human, or environmental sciences at 1862 land-grant institutions. Objectives included describing the need for programs, studying evolution within the discipline, discussing faculty recommendations for future development, and examining why programs are relevant. Qualitative data were analyzed using thematic analysis, which included open and axial coding. A total of 26 academic agricultural leadership programs were identified, and a telephone interview was completed by 19 agricultural leadership faculty members. Results of the study indicated agricultural leadership was historically founded under the umbrella of agricultural and extension education but also evolved from a need in industry. The discipline evolved because the academic subject matter was broadly appealing to students and, and its growth was also spurred by the popularity of community and rural leadership development programs. To improve agricultural leadership programs, faculty surveyed recommended collaborative efforts across the discipline to establish a unified vision and a national professional organization. Throughout the interviews, themes emerged related to the relevancy of agricultural leadership programs in higher education: (1) The agricultural leadership discipline creates leaders through developing "human capital," and (2) graduates promote industry growth through their political, policy, and public influence. Future recommendations for research included identifying perceptions of agricultural leadership beyond the scope of 1862 land-grant institutions.

Keywords: agricultural leadership, academic programs, industry needs, 1862 land-grant institution

Introduction

Agricultural leadership programs have roots at land-grant universities within agricultural education departments but have shifted from primarily educating rural youth to educating undergraduate and graduate students on becoming empowered community members (Velez, Moore, Bruce, & Stephens, 2014). As early as 1989, the Strategic Plan for Agricultural Education

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suggested a need to "amplify and expand the whole person concept of education, including leadership" (National Summit on Agricultural Education, p. 4). In 1994, Brown and Fritz indicated leadership courses and programs offered by departments of agricultural education were well-received and were continuing to climb in both stability and growth. Many higher learning institutions have exhibited a commitment to promoting leadership development programming and preparing societal leaders for future generations (Astin & Astin, 2000).

Identifying historical structures and current realities shaping perceptions of agricultural leadership programs is imperative to understanding how to lead these programs into the future (Williams, Townsend, & Linder, 2005). As Nahavandi (2006) noted, a stronger understanding how leadership develops in differing cultures, programs, and organizations is of utmost importance to understand the context of leadership programming. Yet, while the agricultural leadership discipline has enjoyed success, there is a lack of research-based literature on program objectives, courses offered, perceptions of programming, placement of graduates, and need for programs (Morgan, King, Rudd, & Kaufman, 2013).

The American Association for Agricultural Education (AAAE) and the Association of Leadership Educators (ALE) both produced national research agendas that encompass areas important for agricultural leadership programs. The National Research Agenda (Roberts, Harder, & Brashears, 2016) Priority 5: Efficient and Effective Agricultural Education Programs addresses the need to develop effective academic programs to advance the career, developmental, and academic needs of diverse learners. Additionally, Priority 6: Vibrant, Resilient Communitities addresses the need for communities to have trained leaders to ensure the opportunities for educational and career development experiences for community members. Additionally, the National Leadership Education Research Agenda set forth research priorities to assist in guiding a more structured approach to understanding and teaching leadership (Andenoro, et. al., 2013).The NLERA research priorities are divided into seven primary areas, (1) teaching, learning and curriculum development; (2) program assessment and evaluation; (3) the psychological development of the leader, learner, and follower; (4) the sociological development of the leader, learner, and follower; (5) influences of social identity; (6) social change and community development; and (7) global and intercultural capacity (Andenoro et al., 2013). Leadership research within the agricultural education context needs to explore these priorities with a special emphasis on training, student development, and program growth (Spotanski & Carter, 1993).

Kaufman, Rateau, Ellis, Kasperbauer, and Stacklin (2010) suggest more research must be conducted to clarify the understandings and benefits of agricultural leadership programming. Moreover, Williams, Townsend, and Linder (2005) suggested further qualitative study should be conducted to include known leaders within the field to better understand knowledge of the discipline. By soliciting input from agricultural leadership experts, one might better understand career focus and placement for graduates, objectives of programming, courses taught related to agricultural leadership, and perceptions held by associates within the discipline (Morgan et al., 2013).

Theoretical Framework

Leadership programming has been shaped by theories, models, and methods that have changed and developed as the discipline continues to evolve (Clark, 2001). Two theories guided this study: Ajzen's Theory of Planned Behavior (TPB) and Bloom's Taxonomy. Both theories are useful for examining human behavior, especially decision-making and learning. Ajzen's theory focuses on intentions that represent the motivations of individuals about their conscious plans or decisions to begin a certain behavior (Ajzen & Madden, 1986; Ajzen, 2006). According to Conner

and Armitage (1998), the Theory of Planned Behavior has experienced a high degree of success in predicting and explaining varieties of behaviors, and the TPB model serves as a solid framework for creating plans to change behaviors, which is one of the ultimate purposes of any educational curriculum. Krathwohl (2002) described Bloom's Taxonomy as an aid to academic disciplines by serving as a growth model, and contends the theory puts forth a multi-tiered model to explain the processing people go through.

Theory of Planned Behavior (TPB)

The TPB model explains that behavioral beliefs, such as a person's belief that an action will result in a positive practical outcome, are important motivational factors that influence a given behavior. Positive behavioral beliefs are likely to result in behavior change. Normative beliefs—a person's understanding of social norms—also highly influence individual motivations. In particular, peers' or societies' expectations of a given outcome typically have a significant impact on a people's decisions to change their behavior. These social norms represent a code of human behavior, and they are considered to be the standard of a given group of people.

Ajzen's TPB provides a lens through which the growth and development of the agricultural leadership discipline can be viewed. Faculty members developed leadership degree programs and curriculum at higher-learning institutions by making behavioral decisions based on perceived industry and student needs. The theory explains that "normative beliefs result in perceived social pressure." Essentially, if a person finds a particular attitude or situation more favorable as a norm, the person's intentions will more likely be focused toward performing the behavior in question (Ajzen, 2006). The agricultural leadership discipline has grown in national popularity as the trend to develop agricultural leaders in departments of agricultural education has begun to become the norm. Faculty and departments also appear to have been motivated by the prospect of developing successful programing, and that prospect equates to a growing behavioral belief that may be guiding decisions to create their own agricultural leadership curriculum and degree programs.

Within the agricultural leadership discipline, many students and faculty members come from a rural background or have been associated with youth leadership programs such as 4-H or The National FFA Organization (Connors & Swan, 2006). Just as Ajzen and Madden (1986) explained, social pressure from peers to conform to the norm is often a strong motivational factor; therefore, it is plausible faculty and academic departments may have chosen to participate in the agricultural leadership discipline because (1) the academic subject matter was familiar and (2) because, as they observed their peers at other institutions working in this emerging discipline, they began to view teaching leadership in association with agricultural education as something that was socially normal and, in terms of behavioral belief, represented an effort that was likely to succeed.

Bloom's Taxonomy

With history traced back to 1956, Bloom's Taxonomy has served as a model for academic growth (Forehand, 2005). Often thought to be an accurate model for the examination of higher-order thinking and learning, Bloom's Taxonomy is widely applied to teaching and educational applications across an array of academic disciplines and programs (Krathwohl, 2002). Additionally, according to Conger (1998), qualitative studies framed through Bloom's Taxonomy are optimum for understanding perceptions related to leadership development programming

Bloom's Taxonomy divides the process of learning into categories, or levels, of cognition, arranged from simplest to most complex (Krathwohl, 2002). These six levels include: *remembering, understanding, applying, analyzing, evaluating, and creating*. The general concept

related to these levels of learning is that teaching and learning efforts must progress through the lower levels in order to achieve higher-order learning and critical thinking.

Ricketts and Rudd (2002) asserted that Bloom's Taxonomy can serve as a "comprehensive" model for formal and informal leadership education curriculum and programming, which will add to the arsenal of elements making up a leadership education program (Ricketts & Rudd, 2002). Moreover, Bloom's model aligns with the idea if leadership curricula are to be used as components of a larger leadership development degree program, close attention should be paid to the order in which those educational components are presented to students. With levels of course content in mind, course offerings and rotations should fit with the goals and objectives of the overarching degree program. For example, concepts from leadership courses offered early in the program could be applied in experiential learning curricula such as internships and service-learning courses offered near the end of the program (Lindsay, Foster, Jackson & Hassan, 2009). Similarly, at the programmatic and disciplinary levels, Bloom's Taxonomy dictates that growth should first occur with a focus on the basic foundations of a program or discipline, then progress to deeper, more complex aspects.

Purpose and Objectives

The purpose of this study was to identify and characterize the current agricultural leadership academic programs in colleges of agriculture, food, human, life or environmental sciences at the undergraduate and graduate levels. The study encompassed programs which offered certifications, specializations, concentrations and options focused in agricultural leadership. Three research objectives guided the study, which included:

1. Describe the need for the development of agricultural leadership programs at land-grant universities;
2. Describe agricultural leadership's discipline-wide evolution regarding curriculum, training, teaching practices, and courses offered;
3. Describe faculty members' recommendations on what should be developed or changed to holistically advance curriculum and update programming efforts within the field for future improvement and growth of agricultural leadership programs by analyzing their outlooks for the future of the discipline.

Methods

While qualitative studies are somewhat rare in the leadership discipline because of being time intensive and complex, these types of studies are optimum for understanding perceptions related to leadership development programming (Conger, 1998). This study employed a qualitative approach using interviews as the primary data collection method and thematic analysis of open- and axial-coded data as the primary data analysis method. Qualitative methodologies are integral in collecting data for developing a more complex understanding of a specific topic rather than a generalized, broad perception (Patton, 2002). Therefore, qualitative methods allow the researchers to conduct research in a natural fashion so both data and themes emerge with detail, thus leading to a richer research experience. Interviews, in particular, provide insights into a given culture, group, or organization. Interview results can be better understood through the interpretation of qualitative data (Hertz & Imber, 1995).

Subject Selection

In the U.S., there are 50 1862 land-grant institutions with a college related to agriculture, food, life, human, or environmental sciences (APLU, 2015). Each college's website was searched for the presence of an undergraduate or graduate degree, specialization, concentration or option in leadership. Each university that offered programs where students could receive academic credit for a program related to agricultural leadership were contacted (N=26). Of the 26 identified schools, faculty or administrators at 22 schools agreed to participate in the study and provided names of faculty working in an agricultural leadership program for the interview.

Initial permission was obtained from department heads or administrative deans in the colleges to administer a survey and follow-up interview of an agricultural leadership faculty member at their institution. Faculty members in colleges of agriculture who have taught leadership courses, advised graduate and undergraduate students, and created leadership curriculum were purposively selected as the target population. Four institutions declined to participate in the study, and three individuals did not schedule an interview. This resulted in a 73% (n=19) response rate of institutions that participated in the interview.

Data Collection

Telephone interviews were conducted with the agricultural leadership faculty members at a convenient time identified by the faculty. The interviews were guided by a brief demographic questionaire and by a questioning route, both conceived by a team of researchers with interests in agricultural education, communications and leadership. The questionaire and interview questions were formulated so they most concisely elicited responses taddressing the objectives of this study. To protect human subjects, Institutional Review Board approval was obtained from the researchers' instituion for both the questionaire and the interview questioning route. Faculty members were emailed the interview questions in advance of their telephone interviews, which were conducted within a timespan of approximately two weeks. Each interview was recorded and transcribed in its entirety, and field notes were recorded by the interviewer. Researchers then emailed the transcript back to each faculty member to check for accuracy and clarity as recommended by Glesne (2006). Upon final approval from each faculty member, formal data analysis was ready to begin.

Data Analysis

To add organization to the analysis and reporting process, each interview participant (n=19) was assigned a number, which corresponded to the order in which they completed their interview. For example, the first respondent would be represented as "F1." Quantitative data from the questionnaire were analyzed via simple frequency counts, and qualitative data were analyzed using thematic analysis, including open and axial coding. According to Creswell (2007), open coding is the first step in the data analysis process and involves segmenting interview transcriptions into themes or categories of specific information. Axial coding is the step that follows open coding, where researchers examine the identified themes drawn from open coding and create a central phenomenon to better understand what influenced or caused these segmented pieces of information to take place. Using the NVivo 11 software, the researchers placed words and phrases into categories to identify patterns, and, as each interview transcript, along with field notes taken by the interviewer, was analyzed, words and phrases were matched with similar themes and phrases to align with excerpts with like meanings and opinions.

Credibility, Dependability, and Trustworthiness

Because each interview situation is unique linguisticaly, socially, and psychologically, each participant and researcher experience will be vastly different based on the numerous unforeseen environmental factors, which might occur throughout the research process (Anderson & Jack, 1991; Glesne, 2006). However, steps can be taken in qualitative research to help ensure the quality of the findings. To establish credibility and dependability in this study, the researchers used peer review of the data collection instruments as well as of the analysis of the findings. Member checks were also used to establish the credibility and trustworthiness of the data. The researchers also added another layer of trustworthiness and credibility by analyzing the transcripts in NVivo 11. This provided an audit trail (Lincoln & Guba, 1985) of the analysis process, which was reviewed in summary by the team of researchers. When working to identify open and axial codes emerging from the 19 interviews, the researchers were able to verify, or triangulate, the data understand the results of the study as recommended by Patton (2002).

Findings/Results

There are 26 land-grant institutions with agricultural leadership academic programs housed in a college of agriculture, food, life, human, or environmental sciences. A total of 22 programs initially participated in the study (see Table 1), with 19 participants representing 19 programs completing the entire interview process. Of the 19 participants, five were female while the other 14 were male. The leadership programs have faculty members who serve in various roles such as department head, program coordinators, and assistant, associate, and full professors. Specifically, the subjects included one instructor, eight assistant professors, three associate professors, and seven professors.

Table 1

Agricultural Leadership-Related Programs at 1862 Land-Grant Institutions.

School	Major	Minor	Graduate Degree	Concentration/ Specialization	Certificate
Auburn University		X			
Mississippi State University				Concentration	
New Mexico State University		X			
North Carolina State University	X	X		Concentration	X
Oklahoma State University	X	X	X		
Oregon State University		X			X
Purdue University					X
South Dakota State University				Specialization	
Texas A&M University	X	X	X		X
The Ohio State University	X			Concentration	
The Pennsylvania State University		X		Concentration	
The University of Georgia			X		X
University of Arizona			X	Specialization	X
University of Florida	X	X	X	Concentration	X
University of Idaho	X				
University of Illinois	X				
University of Kentucky	X			Concentration	X
University of Minnesota				Concentration	
University of Missouri		X		Concentration	
University of Nebraska	X	X	X	Specialization	X
University of Tennessee	X	X	X		
Virginia Polytechnic Institute and State University		X		Concentration	X
Total: 22	10	12	7	12	10

Three research objectives guided this study. Each of the corresponding research questions yielded varying themes or, "nodes," as they are called in the NVivo 11 software. Nineteen (n=19) of the possible 26 (N=26) institutions participated in the qualitative interview, which created a response rate of 73 percent. A thorough analysis of the interview data gleaned five overarching areas directly corresponding with each of the interview questions and objectives of the study. Under the five main areas created, the researcher identified a total of nine "nodes," or themes, with three of those themes containing a deeper "node," or sub-theme. Table 2 represents the structure of themes that emerged from the analysis, as well as the frequencies of certain themes.

Table 2

Common Themes of Faculty Perceptions of Agricultural Leadership Programming

Themes	Sources	References
Creation of Agricultural Leadership Education		
• Industry Need for Agricultural Leadership	10	16
• Historical Roots from Agricultural and Extension Education	9	13
Evolution of the Discipline		
• Broad Academic Appeal	10	13
• Maturity and Growth	16	32
▪ Community and Rural Leadership Development	5	12
Recommendations for Future Growth		
• Collective Collaboration	12	22
▪ Creation of a Home	5	7
• Unified Vision for the Agricultural Leadership Education	15	26
▪ Experiential and Service-Learning Opportunities	7	10
Outlook of Ag Leadership Education		
• Growth in Varying Capacities	11	20
Relevancy of Agricultural Leadership Programs in Academia		
• Creating Leaders through Human Capital	15	23
• Political, Policy and Public Influence	6	11

Creation of Agricultural Leadership

Two major themes emerged regarding the growth of the agricultural leadership programs: (1) direct connection to agricultural and extension education, and (2) need for leadership skills in the agricultural industry.

Regardless of the structure and organization of each faculty respondent's academic department, respondents indicated the agricultural leadership discipline draws strong roots from both the agricultural and extension education disciplines. Six respondents (F2, F4, F7, F15, F16,

F17) discussed agricultural leadership as a discipline created on the "coat tails" of agricultural and extension education when senior faculty members identified a need to better train teacher educators and extension agents for their respective fields. Respondent F17 said, "As a land-grant university, obviously, we are a supply stream of extension agents, so the degree was created…" Further echoing that sentiment, respondent F15 indicated agricultural leadership, at her institution, was promoted to students who were studying in teacher preparatory programs, but later decided they didn't want to teach secondary agricultural education.

A second major theme (F1, F3, F8, F10, F13, F18) revealed agricultural leadership saw implementation and growth because of increasing demands from agricultural industry professionals. They expressed the need for graduates to possess a more diverse set of "soft" skills such as leadership, communication, organization and development. F18 suggested graduates lacked a set of structured soft skills or understanding of leadership and personal development. "Overall, agricultural leadership was created here at [my university] because the feedback we got over and over again indicated our graduates were technically competent, but really needed those skills on how to work with others and step up as a leader." Furthermore, the development of some agricultural leadership programs was the direct result of industry leaders approaching college administrators to express the need for curricula in leadership development.

> The agricultural industry leaders from across [my state] came to the dean of the College of Agriculture and Life Sciences here at [my university], and specifically told him that [my university] was doing an exceptional job of teaching content matter to our graduates; however, industry research found a need for students to have more 21st century leadership type skills (F8).

Evolution of a Discipline

Since the creation of the discipline of agricultural leadership, respondents cited the need to establish competencies and an overarching purpose for the discipline.

A majority (n=10) of faculty respondents indicated agricultural leadership has evolved in terms of maturity, definition and growth. The respondents (F1, F4, F7, F8, F9, F10, F12, F13, F14, F15) articulated how agricultural leadership has matured in a broad sense by reinforcing skills from other areas of agriculture. These faculty respondents noted that agricultural leadership curriculum not only promotes leadership education, but also the necessity of learning other skills such as communications, economics, and agricultural policy.

Additionally, respondents F4, F9 and F14 spoke of agricultural leadership serving as something similar to what was once a general agriculture degree at many universities. For example, F9 said, "Agricultural leadership is great for the student who knows exactly what they want to do, or also great for those who have no idea about what they want to do." Moreover, agricultural leadership programs are appealing to students from a variety of disciplinary areas (F14). For example, a leadership minor pairs well with a degree in business, education, or even engineering as it allows students to further develop soft skills to succeed in their given profession.

Respondents F2, F5, F6 and F17 articulated the need for consistency in curriculum nationwide. For example, core courses required of agricultural leadership programs should be similar. This could include courses pertaining to personal leadership development, leadership theory, ethics, and team and organizational leadership. While curriculum among programs still varies, there has been a shift among programs to offer a more standardized curriculum. "There is more structure [in agricultural leadership, nationally] than there was 10 years ago, 15 years ago, or

25 years ago. What I am talking about is a sense of organization to what agricultural leadership actually is" (F2). The movement towards a more standardized approach to agricultural leadership can be evidenced by the creation of the National Leadership Education Research Agenda (NLERA) (F5). The NLERA has not only established target research areas for leadership education but promoted collaboration among agricultural leadership faculty (F5).

Recommendations for Growth

Two main themes were determined regarding question three soliciting recommendations for future growth and improvement. These themes centered on 1) collaboration with faculty across the discipline and 2) a lack of future vision and purpose for the discipline.

Regarding collaboration, 10 faculty respondents (F1, F2, F4, F5, F6, F7, F9, F14, F15, F17) referenced the need for more collaboration among faculty members across the country to create cohesiveness throughout the discipline, share ideas for teaching and research, and to promote and publicize the importance of agricultural leadership. One individual (F5) suggested collaborating outside the discipline to better understand the concepts, ideas and structures that work alongside agriculture. Specifically, respondent F5 gave an in-depth answer regarding the importance of this issue.

> If we don't look at the varying systems that interact with agriculture such as nutrition, climate change, energy consumption, etc., we cannot be effective. The biggest thing we can do for our discipline, and especially our world, is to collaborate with other disciplines because leadership in itself is an inter-disciplinary discipline (F5).

Respondents advocated the need for a professional "home" organization, where agricultural leadership educators could meet to discuss ideas and promote their agenda (F2, F7, F9, and F15).

> There's no single place [organization] that has risen to bring people who do agricultural leadership and agricultural leadership education together. I think about things like AAAE (American Association for Agricultural Education), and I don't think these organizations serve agricultural leadership folks the way it could because it focuses on agricultural education. All of the professional organizations in agricultural communications might serve us, but they aren't (F2).

Respondent F9 indicated "agricultural leadership faculty members exist on their own due to the lack of a designated professional organization. There's not a driving force to do professional development, and everyone has to seek their own opportunities." Another respondent (F15) talked about the need to create dialogue to share ideas, stories, and experiences. "Having this [platform] would help our discipline so much. I don't think we have a great platform to do that because not everyone goes to ALE or AAAE, so we [agricultural leadership] don't really have a place where we can gather as educators…" (F15). Additionally, F2 and F7 made comments about the Association of Leadership Educators (ALE) potentially filling this void. However, both respondents felt ALE had a broad leadership focus instead of a specific focus on agricultural leadership. Moreover, four respondents (F2, F7, F9, and F15) stressed the importance of identifying a professional development home for the agricultural leadership discipline.

Another theme regarding recommendations for future growth and development emerged. Eight faculty members (F1, F2, F4, F5, F6, F14, F15, F17) discussed the importance of creating a

set of standardized key elements that should be present in agricultural leadership programs in terms of course work, curriculum, theory, research and hands-on learning. For example, one respondent (F4) discussed how his institution created a task force to define key elements critical to the success of an agricultural leadership program. The ending result was the evolution of seven program competencies, including leadership and motivation theory, communication skills, change management, conflict management and resolution, team and collaborative leadership development, policy formation, and service/experiential learning opportunities (F4). Other respondents (F1, F4, F6, F9, F12 and F15) talked about components present in their agricultural leadership programs, including capstone courses, internships, international opportunities, research experiences, and service learning opportunities.

Future Outlook

Additionally, the study examined why faculty believe agricultural leadership-related programs are relevant by also analyzing their outlooks for the future of the discipline. Several themes related to sustainability through collaboration and connectedness among professionals, implementation of clear, standardized competencies to be disseminated to students through coursework, and finally, a much larger presence of experiential learning opportunities.

Faculty members' opinions varied significantly in how the discipline would grow, but the majority (F1, F2, F3, F5, F6, F7, F8, F12, F13, F14, F15, F16 and F17) believed agricultural leadership would grow in some capacity. For example, faculty members F7, F13, F14 and F17 each indicated agricultural leadership will experience an influx of students at institutions because of an increased awareness from industry professionals regarding the validity of agricultural leadership. "It [agricultural leadership] allows students within the college [of agriculture] or outside the college to take classes to help develop their leadership skills" (F1). Moreover, respondents cited students recognizing the value of obtaining skills learned in an agricultural leadership program.

> I talk to a lot of perspective students who are passionate about the industry and recognize a need to better communicate and educate the population about the importance of the agricultural industry. I think with that taking place, the agricultural leadership major is a great place to really capture that enthusiasm and build that skill set to accomplish the goals being set forth by industry (F13).

Additionally, an influx of student enrollment in agricultural leadership courses could foster the creation of new agricultural leadership faculty positions. "As you look at the jobs that are opening up across institutions nationwide, often times, they're in leadership, and I think that it will just continue to grow as people see our graduates making huge impacts in the industry by bringing new skills to the table that they've learned in our classroom" (F7).

Relevancy of Agricultural Leadership

The most notable theme expressed among faculty members related to relevancy of agricultural leadership programming (F3, F4, F5, F7, F12, F13, F17) was the idea of creating leaders within communities and rural settings and the agricultural industry. Specifically, F3, F4 and F5 discussed the necessity of agricultural leaders being useful in the political arena by working to influence lawmakers and agency officials to favor agricultural issues. Mimicking those feelings were faculty members F7, F12, F13 and F17, who articulated that agriculture leaders are well-versed about agricultural issues, and having the ability to educate the general public about circumstances and issues facing the industry. "We've got to have those people at the forefront who are well-versed on how to get a group of people moved toward a common goal" (F7).

A number of faculty members attributed the relevancy of agricultural leadership to its students and graduates serving as high-quality leaders. This is because of the ability of agricultural leadership programs to harness "human capital in modern organizations" (F2). Respondents F2, F10 and F15 described the development of human capital through the wide variety of programming areas that takes place in agricultural leadership academic programs. Respondent F15 explained a study recently conducted by the American Association of Universities said "most employers are struggling because the students they're wanting to hire don't have soft skills such as critical thinking, communications and leadership, and we've been doing that all along." Further solidifying F15's statements were F2 and F10, when they reported agricultural leadership remains relevant and sustainable by developing leadership capacities in students with personal development, team development and organizational development competencies.

A final theme related to agricultural leadership's relevancy was shared by faculty members F1, F8, F9 and F16, who described a broad academic area with the unique ability to appeal to a wide variety of individuals. F16 indicated agricultural leadership ties together scholarship with leadership and citizenship skills to cultivate credentialed programming students enjoy. Additionally, agricultural leadership equips students to succeed in the real world.

> I think it [agricultural leadership] is really a wide variety of 21st century skills in being able to collaborate, communicate, critically think and creatively think that our whole industry needs. Any industry is going to teach you exactly what you need to know once you are hired, but I think those four C's I mentioned are what employers are looking for. If you can elaborate on those and effectively communicate your skillset and what you offer to that company, our students will always be in demand, continue to get good paying jobs, and advance up the corporate ladder in the professional world (F8).

F1 echoes the statement by suggesting agricultural knowledge, coupled with leadership skills and knowledge, helps the discipline to grow because of the wide skill set that is applicable in any student's "toolbox." Making a final case for this theme was faculty member F9, who stated "we won't prepare you [student] narrowly in one area, but we will prepare you [student] more broadly in multiple areas, so they [students] don't have trouble finding jobs because they're prepared for a number of areas."

Conclusions and Recommendations

The study sought to gain perspective for future recommendations from leaders within the agricultural leadership discipline. A thorough web search of 1862 land-grant institutions identified 26 institutions with leadership programs hosted in colleges of agriculture, food, life, human or environmental sciences. Interviews were conducted with 19 respondents, including 14 males and 5 females. Respondents were mostly faculty members and included 7 professors, 3 associate professors, 8 assistant professors, and one instructor.

Conclusions and Recommendations for Objectives 1 and 2

The need for the development of agricultural leadership programs appears to have been driven by a demand in industry for graduates with stronger leadership and "soft" skills. While some respondents compared their agricultural leadership programs to a general agricultural degree, further evolution of the discipline away from being simply a general agriculture degree, was, according to respondents, driven by industry demands, as employers complained that students had content knowledge but were lacking in soft skills (Morgan, et al., 2013). Therefore, the importance

of students developing leadership skills has been highlighted to agricultural leadership faculty by the demands of industry (Valez, et al., 2013). Agricultural leadership programs are able to fill this industry need by cultivating a skilled and knowledgeable agricultural workforce that also possesses desired soft skills such as leadership, communication, and organizational and team development skills.

The evolution of the discipline was clearly described by faculty respondents as being strongly connected to the disciplines of agricultural education and extension education. Originally, the discipline served as a program for agricultural education students who did not want to teach secondary agricultural education or become extension educators but rather wanted to go into other agricultural professions.

These two conclusion are supported by Ajzen's Theory of Planned Behavior in a number of ways. TPB is used to predict and explain behaviors and actions based on an individual's beliefs regarding a certain situation. Behavioral beliefs, which focus on likely outcomes related to a person's influence under motivational factors for him or her to perform a certain behavior, can be linked to industry needs for agricultural leadership education. For example, when industry leaders instructed institutions to better prepare students with "soft" skills, the support of industry leaders indicated a higher probability of establishing a successful program as a result of industry support, so academia worked to create new programming. This is a solid example of behavioral beliefs affecting faculty and administrators' intentions and behaviors.

Furthermore, many respondents who were engaged in agricultural leadership education had a background in or knowledge of agricultural and extension education programs, such as 4-H or FFA. These results coincided with the TPB concept of normative beliefs, which indicated people are more likely to perform a certain behavior if it is promoted by an action that is part of one's social norm. As faculty expressed detailed knowledge of agricultural leadership programming, their behaviors could be described as "socially normal" because other faculty work to advocate for and improve common areas across the discipline.

Members of the discipline certainly claim their agricultural education and extension education roots and are motivated by industry's demand for their students. These concepts should be embraced by the discipline as strengths and as part of the foundation of the discipline.

Conclusions and Recommendations for Objective 3

Faculty members' opinions of how the curriculum, programs, and the discipline should change and grow were also very clear. Since the creation of the discipline, few efforts to establish disciplinary standards and competencies have been made. Yet, faculty opinions indicate that agricultural leadership programs lack consistency in curriculum, skill sets, and research focus from one institution to another. This could be a result of a lack of efforts to establish cohesiveness and foster collaboration among agricultural leadership faculty. Many respondents cited the lack of a professional home organization for the discipline.

Similar results were indicated by a study conducted by Valez, McKim, Moore, and Stephens (2015) which found agricultural leadership faculty felt they had only minimal to moderate support from AAAE in regard to professional development and research endeavors. Moreover, respondents cited ALE as a professional organization with an emphasis in leadership but cited the organization did not completely fulfill the needs of agricultural leadership educators. One way to promote professional development opportunities for teaching and research is to establish pre/post-

conference sessions specifically dedicated to agricultural leadership education at major meetings of organizations such as NACTA, AAAE, ILA, or ALE.

The lack of a professional development organization dedicated to agricultural leadership could contribute to the absence of consistency in curricula among agricultural leadership programs. Currently, there are not established key competencies for agricultural leadership programs. The development of key competencies would impact courses offered, experiential learning opportunities, and theories infused into the curriculum. Respondents cited a need for opportunities to collaborate on curriculum development, course work, and research opportunities to create cohesiveness throughout the discipline. Establishing consistency among programs is important as agricultural leadership faculty are working to educate future leaders within the agricultural industry (Velez, et al., 2014).

The findings of this study also revealed that respondents expect the agricultural leadership discipline to continue to grow in course offerings, student numbers, graduate programs, and creation of faculty positions. This predicted growth of agricultural leadership programs could be related to industry demand for a skilled, educated workforce that possesses soft skills (Morgan, et al., 2013). Growth in student numbers could also be related to the interdisciplinary nature of agricultural leadership programs where majors, minor, concentrations, certificates and specializations pair well with other programs such as business, education, and engineering. However, the discipline should move forward cautiously, because growing too quickly without an overarching vision and plan for continued growth could be detrimental. Ensuring that the discipline retains its faculty, infrastructure, and professional development support needed to remain viable within academia is paramount (Velez, et al., 2015).

Theoretical ties for recommendations to the discipline can be linked to several components of Bloom's Taxonomy, which, at its core, is used to promote higher levels of learning in education. First, the *understand* component of Bloom's Taxonomy aligns with recommendations from faculty who addressed issues in the discipline, such as a lack of professional home or benchmarks for evaluation. Understanding promotes the explanation of ideas or concepts such as recognition, identification, discussion, and classification. In order for development to take place among nationwide programs, academic professionals must first understand the issues at hand.

Another specific element of Bloom's Taxonomy that can be identified in the results is *create*. The creation element of the model highlights the production of new work through investigation, design, construction, and development. Reaching the top level of Bloom's was achieved through respondent recommendations regarding the creation of standardized "benchmarks" to measure varying aspects of the discipline. By designing and creating benchmarks to measure discipline standards for growth, success, education, and advancement, agricultural leadership meets the highest level of measurement for educational objectives and outcomes (Krathwohl, 2002).

Based on the conclusions of this study, a further recommendation that seems evident is for the discipline to work toward adding professional diversity to its membership. Specifically, it is interesting to note there were few (n=3) respondents with the rank of associate professor. Instead respondents were either assistant professors (n = 8) or professors (n=7). Additionally, respondents were predominately male (n = 14) with only five female respondents in the study. A study analyzing the demographics of agricultural leadership faculty should be conducted to further describe the professional makeup of the discipline.

The nationwide growth witnessed in agricultural leadership programs has been evident for a number of years (Schwartz, Axtman, & Freeman, 1998). Growth and distribution related to programs at 1862 land-grant institutions has been fairly concentrated to one geographic area. Results of this study revealed 15 agricultural leadership programs are located east of the Mississippi River, whereas 11 programs are located to the west. While this may appear relatively even, it's interesting to note of those 15 programs located in the eastern half of the country, 10 schools (38%) are located in the southern region of AAAE. Future research might be conducted in eastern or western regions of the United States to determine if students in certain areas of the country without agricultural leadership education programs might be deficient in leadership related "soft" skills, as opposed to areas where programs are more prevalent.

Another interesting piece of research might analyze the national chasm in agricultural leadership programs regarding the placement of programs in regions where agricultural production remains more prevalent, as opposed to urbanized areas where production agriculture is nearly non-existent. A comparison of agricultural leadership competencies among industry professionals in the southern United States against industry professionals in the northeast section of the country might better explain any dichotomy in regional leadership skills and proficiencies.

While this study focuses on faculty perceptions about the discipline, future studies should be conducted to determine student perceptions, present and past, of agricultural leadership programs. Specific exploration should focus on key concepts and skills learned through course work, perceived levels of faculty preparation, experiential learning opportunities, and job placement post-graduation. A student-focused study would assist faculty by identifying specific areas of improvement needed within the discipline while providing insight to student needs.

Recommendations also include analyzing each program's course structure to understand if programs are more agriculturally focused with a leadership component or leadership focused with agricultural components. As one faculty member stated, professionals in the field must answer the question "what is agricultural about agricultural leadership?" Perhaps research would better answer that question. If agricultural leadership education is to be successful long-term, future research should be conducted to expand on this study, perhaps go beyond the confines of 1862 land-grant institutions, to better grasp the entire structure and outlook of agricultural leadership programs across the nation.

Conducting research in the previously-mentioned areas might further the understanding of agricultural leadership programs aligning with general agricultural degrees. This supports previous recommendations given by Mannebach (1990) and Spotanski and Carter (1993), who said research in agricultural leadership should cast a wide net to encompass a multitude of programs to better understand research priorities focused in teaching, research, training, student development, program size and structure, and programmatic growth. Graham (2001) recommended the spectrum of agricultural leadership education should accommodate new environments and situations to best ensure survival by promoting all aspects of the field.

Finally, as the discipline continues to grow, leaders within the discipline should work to establish a professional development organization dedicated to agricultural leadership. The need for organized professional development opportunities for agricultural leadership faculty is growing (Velez, et al., 2015), and this sentiment was definitely present among the faculty respondents in this study. A professional development organization could work to establish key program competencies, foster opportunities for sharing ideas, create collaboration efforts to improve research, and develop faculty partnerships to collaborate on grants. Additionally, the creation of

such organization would provide agricultural leadership faculty with professional development needed to ensure high quality leadership programs.

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