

## **LEADERSHIP SKILLS AND COMPETENCIES FOR EXTENSION DIRECTORS AND ADMINISTRATORS**

*Lori L. Moore, Assistant Professor*  
University of Idaho

*Rick D. Rudd, Associate Professor*  
University of Florida

### **Abstract**

*The primary purpose of this study was to identify the major leadership skill areas and specific leadership competencies within each skill area needed by Extension leaders. A purposive sample of administrative heads of agriculture from 1862 and 1890 land-grant institutions was selected to participate in qualitative interviews. Seven individuals participated in long interviews (Creswell, 1998; McCracken, 1988) designed to identify leadership skills necessary to be a leader within the CSREES. Participants identified six major leadership skill areas needed by Extension leaders: human, conceptual, technical, communication, emotional intelligence, and industry knowledge skills. A total of 80 specific leadership competencies were developed and clustered under one of the six leadership skill areas.*

### **Introduction and Theoretical Framework**

The Cooperative State Research, Education, and Extension Service (CSREES) is a unique organization in terms of structure and function. It is composed of state partners representing the land-grant universities in each state. Many Extension leaders, including those in the state director and administrator positions, are promoted almost exclusively from within based on their performance in previous positions (Patterson, 1997; Pittman & Bruny, 1986).

Performance evaluations are standard practice in both public and private sector organizations (Patterson, 1987). There is an environment of accountability today that requires employee evaluations in many organizations and institutions, including the CSREES. Performance evaluations are designed to evaluate how well an individual actually performs their responsibilities. In contrast, a competence assessment is designed to evaluate individual knowledge, education, skills, experience, and proficiency to perform those assigned responsibilities (Herringer, 2002). In many instances, it is performance evaluations rather than competence assessments that are considered when selecting individuals to be

promoted within an organization. Unfortunately, promotion based on job performance in a previous position does not necessarily lead to success in a new position.

The concept of identifying core competencies is not new to Extension. Many studies have been conducted for a variety of positions within Extension. In their 1979 study, Beeman, Cheek, McGhee, and Grygotis first assessed the importance of core competencies needed by Extension agents in Florida as perceived by county agents and state staff. In their study, state staff rated the competency clusters included in the study as more important than did the county agents. Betts, Firth, Watters, & Shepherd (1996) reported that an Arizona team determined core competencies for county agents working with youth- and families-at-risk. The seven competencies they identified as priorities were: finding funding for new audiences, dealing with turf issues, integrating current and emerging programs, assessing audiences, integrating new audiences, initiating change, and evaluating. Cooper and Graham (2001) identified 57 competencies needed by county agents and county Extension supervisors in Arkansas. Their study also compared the perceptions of each group

toward the level of importance of each competency.

In terms of core competencies for leaders, few studies have focused on Extension. In an attempt to more clearly define leadership development, the National Impact Study of Leadership Development in Extension (NISLDE) asked Extension staff what leadership meant to them. The result was the identification of 13 broad leadership competencies: (1) solving problems, (2) directing projects or activities, (3) forming and working with groups, (4) planning for group action, (5) managing meetings, (6) communicating effectively, (7) developing proficiency in teaching, (8) mobilizing for group action, (9) understanding and developing oneself, (10) understanding financial matters, (11) understanding leadership, (12) understanding society, and (13) understanding social change (Paxson, Howell, Michael, & Wong, 1993).

Some leadership competencies may be transferable, but it is nonetheless important to look at specific competencies needed within a particular organization (Barner, 2000; Fulmer & Wagner, 1999; Pickett, 1998). An Extension leader must fulfill a number of different roles, and therefore, must prove their competence in many diverse areas. However, no study could be found that attempted to identify the leadership skills and specific leadership competencies desired in the senior leaders of the organization.

#### *Leadership Competencies*

Based on Herringer's (2002) description of a competence assessment, competence can be defined as the ability of an individual to perform a task using his/her knowledge, education, skills, and experience. Competencies, especially when used in competence assessments, should relate to the specific tasks required to perform successfully in a given position. The identification of key competencies provides for individual and organizational growth, and helps the organization meet future demands (Pickett, 1998). Pernick (2001) identified three ways in which organizations determine critical leadership competencies: (1) use generic leadership competencies

found in theory, (2) build their own competencies, or (3) derive competencies from the organization's mission statement and core values. As a result of organizational differences, such as size and structure, and the different methods of identifying leadership competencies, there is no universal set of leadership competencies appropriate for all organizations.

#### *Leadership Skills*

Within an organization, identifying critical leadership competencies required for effectiveness helps define what skills leaders need (Pernick, 2001). According to Katz (1955), a skill can be defined as "an ability which can be developed, not necessarily inborn, and which is manifested in performance, not merely potential" (p. 33-34). Similarly, Nahavandi (2000) defined a skill as "an acquired talent that a person develops related to a specific task" (p. 49). Katz (1955) identified three categories of skills needed by leaders: technical skills, human skills, and conceptual skills.

Each skill is necessary for successful leaders to possess, but the amount of each skill may vary depending on position within the organizational hierarchy. Technical skills are more important at the lower levels of administration (Goleman, 1998; Hicks & Gullett, 1975; Katz, 1955). As a leader moves up in the organizational hierarchy, he/she relies on the technical skills of followers more than on his/her own technical skills (Hicks & Gullett, 1975). Human skills are essential throughout all management levels (Hicks & Gullett, 1975; Katz, 1955). Conceptual skills are perhaps most important at top management levels where policy decisions, long-term planning, and broad scale actions are required (Hicks & Gullett, 1975; Katz, 1955).

Newer approaches to leadership skills have been built upon the technical, human, and conceptual skill classification, but are slightly different. Goleman (1998) outlined three domains of leadership skills: purely technical skills, cognitive abilities, and competencies that demonstrated emotional intelligence. There are five components to emotional intelligence: self-awareness, self-regulation, motivation, empathy, and social skill.

Goleman (1998) included emotional intelligence as a set of leadership skills because he saw it as the distinguishing competence of senior leaders. In fact, he reported emotional intelligence to be twice as important as the others when applied to all levels of jobs within the organizational hierarchy, and found emotional intelligence, rather than conceptual skills, to explain 90% of the difference in the effectiveness of star performers and average senior level leaders. Within the Extension system, Ayers & Stone (1999) have supported the link between emotional intelligence and core competencies of Extension personnel.

In a study in which they designed a leadership competency instrument for healthcare administration, Robbins, Bradley,

and Spicer (2001) identified four leadership skill domains. Their assessment instrument contained 52 items that were classified as technical skills, industry knowledge skills, analytic and conceptual reasoning skills, or interpersonal and emotional intelligence skills. They identified industry knowledge as a domain of skills due to the complex nature of the healthcare industry.

The theoretical framework for this study was based on leadership skill areas cited in the literature (Goleman, 1998; Katz, 1955; Robbins, Bradley, & Spicer, 2001). The major leadership skill areas that served as the basis for this study were: human, conceptual, technical, emotional intelligence, and industry knowledge skills (see Figure 1).

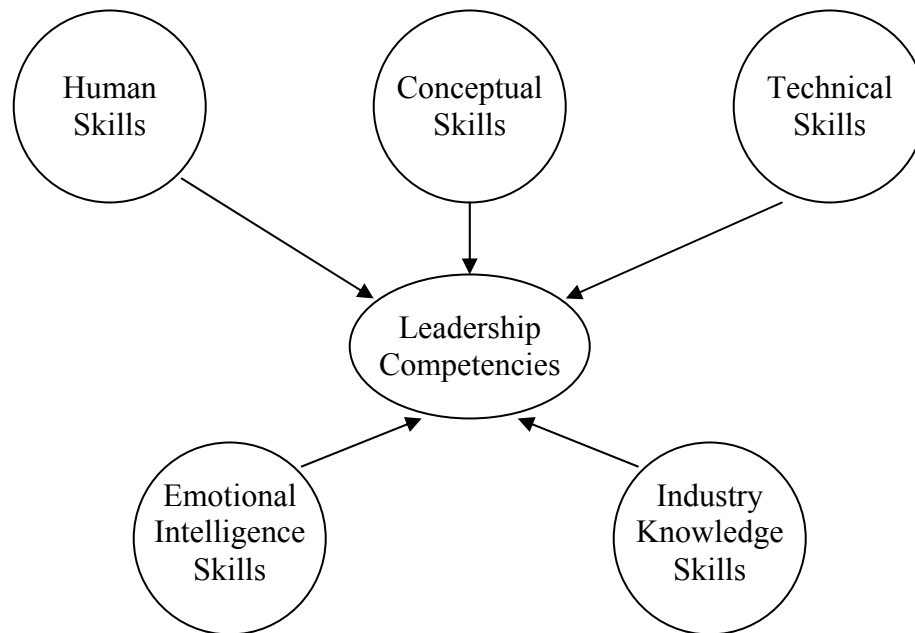


Figure 1. Conceptual Framework

### Purpose and Objective

The purpose of this study was to identify the leadership skills and competencies needed by Extension leaders in state director and administrator positions. This study was part of a larger research project concerned with identifying and describing the leadership styles and skills of Extension leaders within the CSREES. The specific objectives of this qualitative study were to:

1. Determine the leadership skill areas needed by Extension leaders, as perceived by their administrative heads.
2. Determine the leadership skills within each skill area needed by Extension leaders.
3. Determine the specific leadership competencies within each skill needed by Extension leaders.

## Research Methods and Procedures

### *Population and Sample*

The population of interest for this study consisted of 102 administrative heads of agriculture. The administrative heads of agriculture were identified as those individuals in the chief administrator positions of the agricultural programs in the member universities of the National Association of State Universities and Land-grant Colleges (NASULGC) and those individuals primarily responsible for hiring Extension directors and administrators. A purposive sample of 11 administrative heads was selected from a current list obtained from NASULGC. These individuals were identified by a panel of Extension administrators and educators as those most familiar with the entire Extension system which includes a variety of program areas such as agriculture, youth and 4-H, and family and consumer sciences. The use of such a purposive sample was intended to reduce any potential bias that may have been introduced by administrative heads that were unfamiliar with the Extension system as a whole. According to Barner (2000), "it makes no sense to try to identify essential leadership capabilities unless one knows the business context in which the leaders will be expected to excel" (p. 47). Therefore, a purposive sample of administrative heads identified as most knowledgeable about Extension was used to collect data on the leadership skill areas and specific leadership competencies needed by Extension leaders.

### *Instrumentation*

Qualitative interviews (Creswell, 1998; McCracken, 1988) were used to accomplish the research objectives. Prior to the interview, participants were sent a summary sheet developed by the researchers based on a review of literature. The summary was divided into five major skill areas: technical skills, human skills, conceptual skills, emotional intelligence skills, and industry knowledge skills. The summary sheet described the skill area and provided two examples of specific leadership competencies within each skill area. The purpose of this summary sheet was to help participants focus their thinking on the types

of competencies needed by Extension leaders. This summary sheet was evaluated for content and face validity by a panel of experts prior to sending it to participants. The experts included an associate dean of Extension and four university faculty members with at least partial Extension appointments.

An interview questionnaire developed by the researchers based on the review of literature was used during the interviews (McCracken, 1988). The interview questionnaire was evaluated by the same panel of experts for content and face validity prior to the telephone interviews.

### *Data Collection and Analysis*

Telephone interviews were conducted with the participants over a two-month period during the fall of 2002. Interviews lasted between one-half and one hour. Each interview was tape-recorded and transcribed in its entirety as soon as possible following the interview.

The transcripts and audio-tapes were reviewed by the researchers once to get a general sense of all of the data, and again to be analyzed for content and coded (Creswell, 1998). Based on the review of literature, a "start-list" of codes was created by the researchers prior to coding (Miles & Huberman, 1984). This provided a base for coding the data, but codes were revised, eliminated, or added as necessary. Thus, the review of literature served as a guide during the coding process, but did not prohibit the revision of codes or the emergence of new ideas. Codes were considered trustworthy when saturation of the data occurred. Therefore, codes that appeared in only one transcript were removed from consideration.

The remaining codes were counted, sorted into categories, and combined into themes by the researchers to reduce and generate meaning of the data collected during the interviews (Creswell, 1998; Miles & Huberman, 1984). To categorize the codes, the researchers used preexisting themes that had been documented in the literature as well as themes that emerged from the data (Miles & Huberman, 1984). These themes served as the leadership skill areas. In essence, the literature review began the search for the leadership skill areas, but

the interviews were of utmost importance to continue the search for meaning (McCracken, 1988). Within each theme, the codes, which served as the leadership skills, were sorted and clustered by the researchers. The codes were refined and specific leadership competencies were then developed within each skill based on the specific comments of the interview participants and the literature base.

**Results**

Six major leadership skill areas emerged from the analysis of the interview data. The five skill areas identified in the literature review prior to the interviews emerged. In addition, communication skills emerged as an additional leadership skill area. The following statement from one of the interview participants is indicative of the need to include communication skills:

I hope that the human skills and people skills would encompass some other things other than being able to, I suppose oral presentations is what I

see that comes out here. We have a whole communications wing that helps support what their director or dean wants to put together in a speech, but I think sometimes, the interaction with people, whether it's scripted or not, is one of the most important things tied into leadership as well. And so writing I think factors into that because there are some things that only directors write. I didn't see that broken out as a particular skill and I think one of the most important ones is listening. And I think the reading, writing, speaking, and listening ought to somehow be in this particular section of people skills.

Fifty-six leadership skills emerged from the interviews. These are presented in Table 1. When the skills mentioned by only one participant were removed, 45 skills remained. These skills were clustered into one of the six leadership skill areas. From these skills, a total of 80 leadership competencies were developed (see Table 2).

Table 1  
*Leadership Skills*

Skill	Skill	Skill
Mentoring	Sense of humor	Competent (in technical area)
Vision	Political environment	Context/role of Extension
Listening Skills	Create linkages	Critical/creative thinking
Motivation	Extension priorities	Goals (set and achieve)
Time management	Conflict resolution	Organizational change
Positive attitude	High values	Electronic communication
Empathy/respect	Appreciate position	Communication (settings)
Know constituencies	Reading skills	Networking abilities
Speaking skills	Identify talent	Written communication
Relationship builder	Appropriate behavior	Understand social problems
Open/approachable	Administrative skill	Run meetings/set agendas
Budgeting	Stability	Strategic/sequential planning
Finances/fundraising	Decision making	Maturity (criticism/emotions)
Courage	Media interaction	Gregarious and bright
Energy/enthusiasm	Flexibility	Understand program areas
Team player/member	Negotiation	Keep up with what's going on
Honesty/integrity	Internet skills	Cultural awareness/diversity
Evaluate people	Coaching	Leadership development
Computer skills	Team leader	

Table 2  
*Leadership Competencies and Skills Within Skill Areas*

Skill Area	Skills	Competencies
Human Skills	Relationship builder	Foster relationships Demonstrate respect for others
	Open/approachable	Create environment where leader is approachable and open to new ideas Create an environment in which team members are willing to share ideas
	Team member/player	Be a effective team member
	Evaluate people	Evaluate the impact of personnel
	Team leader	Be an effective team leader
	Cultural awareness/diversity	Create an environment that values the diversity of others
	Identify talent	Identify personal strength Identify strengths and weaknesses of others Surround themselves with people of complimentary strength
	Mentoring	Be an effective mentor
	Leadership development	Demonstrate support for organizational leadership development programs
	Coaching	Be an effective coach
Conceptual Skills	Understanding Social Problems	Demonstrate empathy for social problems
	Vision	Create a long term vision for the organization Communicate an organizational vision with others Create environment where all people take ownership of the vision
	Strategic/sequential planning	Think strategically Utilize sequential planning techniques
	Decision making	Be decisive
	Critical/creative thinking	Think critically Think abstractly as well as linearly Think creatively
	Goals (set and achieve)	Set goals Achieve goals
	Organizational change	Create an environment that supports organizational change Help others support organizational change Exhibit an attitude that supports and welcomes organizational change

Table 2 (Continued)

Skill Area	Skills	Competencies
Technical Skills	Budgeting	Developing budgets for all levels within the organization Interpret and explain organizational budgets Implement and adjust organizational budgets to accomplish programs
	Finance/fundraising	Raise funds from external sources Work with foundations
Communication Skills	Computer skills	Effectively use computer software for word processing Use computer software for databases Effectively use computer software for databases
	Internet skills	Effectively integrate computer program applications (i.e. merge files) Effectively use and search the internet
	Competent (technical area)	Possess depth of knowledge in a content area
	Listening skills	Actively listen to people Identify barriers to listening Reduce barriers to listening
Communication Skills	Speaking skills	Communicate orally with groups of various sizes (one-on-one to large group) Conduct quality oral presentations
	Communication (settings)	Communicate orally with groups of various backgrounds Interact and communicate with individuals with various depth of knowledge capabilities
	Reading skills	Interact and communicate with people who have divergent points of view Recognize and effectively use nonverbal cues or behaviors
	Electronic communication	Read and comprehend a wide range of publications Effectively communicate with others using electronic communication
	Media interaction	Interact with themedia
Communication Skills	Written communication	Write for various organizational purposes Write for various aduiciencies

*Skill Area One: Human Skills*

The human skills area had more skills than any other area. From the eleven skills clustered into the human skills area, fifteen leadership competencies were developed (see Table 2). When asked to identify the specific leadership competencies Extension leaders need related to human skills, one study participant replied, "I think we could talk about that all day."

Five of the seven participants mentioned something about being a relationship builder. For example, one participant said, "Evidence of relationship building skills and a value for human relationships" while another participant said, "And I think it's very, very important for someone in a leadership position to not only foster strength that you can get from team relationships, but also to be someone who fosters trust among team members."

Two of the skills that emerged from the data in this area were related to teams. Although related, these were kept as separate skills. According to one study participant:

And you have to be, for sure to be both an effective team leader and an effective team member when you're not the leader because you're gonna be in situations no matter what your position is where you're not the leader.

*Skill Area Two: Conceptual Skills*

From the six skills clustered into the conceptual skills area, fourteen leadership competencies were developed (see Table 2). Within this area, all seven participants referred to some aspect of having a vision. As one of the participants explained:

You know, this is vision. I would put vision in this. You're able to create a vision. I surely think that's not only to create the vision, but also lead the group, your organization, to the point where they finalize the vision and take ownership of it. I think that the leader's got to give them a glimpse of the vision, but the completeness of

the vision needs to be developed by the organization where they take ownership of that vision. So, it not just the director's vision, it's the organization's vision.

*Skill Area Three: Technical Skills*

The technical skills area had the fewest number of skills. From the five skills clustered into the technical skills area, eleven leadership competencies were developed (see Table 2). Participants offered conflicting views related to the skills related to using computers. Some participants saw computer skills as less important. For example, one participant stated:

I think it's less, quite honestly, and very candidly, I think it's of less importance that our directors be able to effectively use PC software and word processing, spreadsheets, and databases until it gets into their management responsibilities. And if they can't do that, they're not going to be even considered.

Similarly, another participant from a larger institution stated, "Technical skills really don't come up real high in terms of the skills that are needed I don't believe. It's nice to have them, but, they're not something that are gonna be a big limitation I don't believe."

Two other participants who discussed computer skills saw them as important skills to have within the technical skills area. One of these participants offered the following comment:

Where you've got word processing, spreadsheets, and databases, you also need to know how to integrate those. How to go from one to the other and merge files, collapse files. But, you also need, not only to know how to use them, but also how to integrate them. You need to know how to integrate those skills, not just use them independently.

The other participant who spoke positively about PC software and computer skills as a

technical skill referred to them as "...pretty obviously critical." Because there was saturation of the data representing both perspectives, computer skills were left in the technical skills area.

Other skills in the technical skills area, such as budgeting, finances and fundraising, and technical competence in some area were much less controversial. Participants saw these as important to the success of Extension leaders.

#### *Skill Area Four: Communication Skills*

Each participant mentioned some form of communication in their interview. As a result, communication skills were identified as a separate skill area. From the seven skills clustered into the communication skills area, fourteen leadership competencies were identified (see Table 2).

Participant comments varied based on the type of communication they were referring to. For example, one participant pointed out the importance of communication with the media:

And the other one, you know, I thought about, and this is something that every Extension director/administrator has to do, they have to interact with the media. And again, there's some, there are some, we run training programs ourselves to help people be more skillful in interaction with newspaper reporters, television reporters, radio reporters...it's communication skills, but it's targeted to particular audiences.

Another participant described the importance of communication in various settings by stating:

If that person doesn't possess the tremendous skill in communication, it would be very hard for them to carry out the mission of Extension. The ability to communicate, to stand up in front of any group, or one-on-one is very important.

Six of the seven participants referred to the importance of listening skills as

important to the success of Extension leaders. For example, one participant stated:

One thing I've noticed that I've been talking about lately is being able to listen, auditory skills. Being able to listen. The thing is, I was talking to the staff, the staff out there, not just the Extension director, but there is research and the department chairperson, you need to refine or improve the ability of just listening to what our people are saying. So their auditory skills are very important.

#### *Skill Area Five: Emotional Intelligence Skills*

From the nine skills clustered into the emotional intelligence skills area, fourteen specific leadership competencies developed (see Table 2). Six participants discussed the importance of time management skills and being balanced in one's life. One participant had this to say about time management, "Obviously the ability to... to manage your time. I always used to think I was pretty good in time management until I got in a big enough job that uh, that I found, I found I needed to get better." Similarly, another participant stated, "This one, I was laughing this morning, I told my secretary that I don't effectively manage my personal time." Both of these participants discussed the importance of Extension leaders being able to seek balance between their personal and professional lives and effectively manage their time in both areas.

Another skill that four of the seven participants discussed centered on emotional maturity in terms of being able to receive criticism without becoming critical or hearing bad news without "shooting the messenger." For example, one participant stated:

Calmness, you have to be able to control your emotions. You know, one way or the other and uh, sometimes you've gotta hear some things you don't like and maybe even upset you, but you can't let your emotions control your actions.

Another participant had the following to say in relation to emotional intelligence skills:

An ability to take criticism and anger without becoming critical and angry themselves. And that is described I guess as maturity so that they can focus on their objective rather than getting embroiled in the personality parts of people's reactions.

#### *Skill Area Six: Industry Knowledge Skills*

From the seven skills clustered into the industry knowledge skills area, twelve leadership competencies were developed (see Table 2). All seven participants identified understanding the context and/or role of Extension as being an important industry knowledge skill. For many of the participants, this begins by first defining the industry. One participant stated:

And I think, ...when we say industry, we often think agriculture, and yet we should be thinking much broader. Who is, who are the constituencies? It isn't just agriculture. It's basically the entire state. And so one has to be able to think about the organizations and the people that are in that other than the ag industry.

Participants also discussed what leaders needed to know specifically related to Extension. Comments included knowing who the constituents of Extension are within the state, understanding their cultural base, and knowing the political environment influencing Extension. Participants were concerned that Extension leaders understand and recognize the implications of Extension at the national level. One of the participants explained,

I'd also want someone who understood not only what the state priorities are, which I think are usually pretty obvious, state legislatures are usually pretty close to Extension. But, the national priority system is also important, and I don't think as easily understood by leadership and I

would want someone who understood the national priorities, and how the formula funds are applied, and what work product is, and work plans and the demands from the national perspective. I'd want somebody who understood that very well.

### **Conclusions and Implications**

From the data, it was concluded that Extension leaders need competence in six leadership skill areas: human, conceptual, technical, communication, emotional intelligence, and industry knowledge skills. Because the administrative heads were provided with a set of example skills based on the literature (Goleman, 1998; Katz, 1955; Robbins, et al., 2001) prior to the interview, it was to be expected that participants would identify leadership competencies within five of the six areas identified. However, in this study, communication skills, a leadership skill area not previously identified in leadership skills literature as a separate, important skill area, also emerged. Although communication skills was not identified as an independent leadership skill in the literature, it has been identified as an important skills set for Extension leaders to possess. Holder (1990) recommended the inclusion of communication and listening skills, as well as visionary and futurism training, and enabling skills, such as empowerment and delegation, in Extension leadership training programs for Extension faculty.

There appears to be interrelationships between the leadership skills within and between skill areas. This is not a surprising finding due to the fact that leadership involves both the attitudes and behaviors exhibited by leaders and the influence of these on followers. Many of the skill areas include competencies that relate to the leader themselves, and similar competencies that relate to the impact these have on followers. In the conceptual skills area, one of the competencies was that the leader have the ability to create a vision (behavior) and other competencies related to how well that vision

is communicated to the organization such that everyone takes ownership of it (impact). Competencies within one area do not appear to exist independently of those in other areas. For example, competencies in the emotional intelligence skills area, such as resolving conflict, require leaders to effectively use competencies from the communication skills area, such as actively listening to people and identifying and reducing barriers to listening. This suggests that leaders need competence in each skill area. In essence, the interrelationships between competencies support the notion that leadership cannot exist in a vacuum.

The competencies developed in this study should be used to create an instrument that assesses the competence of potential leaders. The reliability and validity of the instrument should be established. The use of the instrument should be further tested using factor analysis to examine the dimensionality of leadership as a construct. It is recommended that leadership development programs in Extension focus on developing the skills of participants in the six skill areas, thus creating a large pool of competent individuals for future leadership positions.

Further research into leadership competencies in Extension needs to be conducted. Assessing the perceptions of current Extension leaders regarding the importance of the skill areas and competencies identified in this study would further increase the trustworthiness of the findings. The findings of Beeman et al. (1979) indicate that various groups within Extension rate competency clusters differently. The possibility that current Extension leaders do not perceive the same skill areas and competencies as important to their success as the interview participants in this study needs to be investigated.

## References

- Ayers, D., & Stone, B. (1999). Extension organization of the future: Linking emotional intelligence and core competencies. *Journal of Extension*, 37(6), Retrieved March 22, 2003, from <http://www.joe.org/joe/1999december/iw4.html>
- Barner, R. (2000). Five steps to leadership competencies. *Training & Development*, 54(3), 47-51.
- Beeman, C. E., Cheek, J. G., McGhee, M. B., & Grygotis, E. M. (1979). Professional competencies needed by Extension agents in the Florida Cooperative Extension Service: A report of research. Gainesville: University of Florida, Institute of Food and Agricultural Sciences.
- Betts, S. C., Firth, A. M., Watters, S., & Shepherd, S. (1996). Families-at-risk. *Journal of Extension*, 34(2), Retrieved March 22, 2003, from <http://www.joe.org/joe/1996april/a4.html>
- Cooper, A. W., & Graham, D. L. (2001). Competencies needed to be successful county agents and county supervisors. *Journal of Extension*, 39(1), Retrieved March 22, 2003, from <http://www.joe.org/joe/2001february/rb2.html>
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Fulmer, R. M., & Wagner, S. (1999). Leadership: Lessons from the best. *Training & Development*, 53(3), 29-32.
- Goleman, D. (1998). What makes a leader? *Harvard Business Review*, 76(6), 93-102.
- Herringer, J. M. (2002). Once isn't enough when measuring staff competence. *Nursing Management*, 33(2), 22.
- Hicks, H. G., & Gullett, C. R. (1975). *Organizations: Theory and behavior*. New York: McGraw-Hill Book Company.
- Holder, S. L. (1990). *Leadership style and leadership behavior preferences of cooperative extension faculty*. Unpublished doctoral dissertation, New Mexico State University, Las Cruces.
- Katz, R. L. (1955). Skills of an effective

administrator. *Harvard Business Review*, 33(1), 33-42.

McCracken, G. (1988). *The long interview*. Newbury Park, CA: Sage Publications, Inc.

Miles, M. B. & Huberman, A. M. (1984). *Qualitative data analysis: A sourcebook of new methods*. Beverly Hills, CA: Sage Publications.

Nahavandi, A. (2000). *The art and science of leadership* (2<sup>nd</sup> ed.). Upper Saddle River, NJ: Prentice Hall.

Patterson, T. F. (1987). Refining performance appraisal. *Journal of Extension*, 25(4), Retrieved March 22, 2003, from <http://www.joe.org/joe/1987winter/a5.html>

Patterson, T. F. (1997). Fundamentally flawed: Extension administrative practice part 1. *Journal of Extension*, 35(6), Retrieved May 1, 2002, from <http://www.joe.org/joe/1997/december/com m2001.html>

Paxson, M. C., Howell, R. E., Michael,

J. A., & Wong, S. K. (1993). Leadership development in Extension. *Journal of Extension*, 31(1), Retrieved March 22, 2003, from <http://www.joe.org/joe/1993spring/rb2.html>

Pernick, R. (2001). Creating a leadership development program: Nine essential tasks. *Public Personnel Management*, 30(4), 429-444.

Pickett, L. (1998). Competencies and managerial effectiveness: Putting competencies to work. *Public Personnel Management*, 27(1), 103-115.

Pittman, J. D. & Bruny, L. (1986). Promotion from within anyone qualified? Training program creates a pool of potential administrators. *Journal of Extension*, 24(2), Retrieved May 8, 2002, from <http://www.joe.org/joe/1986summer/a2006.html>

Robbins, C. J., Bradley, E. H., & Spicer, M. (2001). Developing leadership in healthcare administration: A competency assessment tool. *Journal of Healthcare Management*, 46(3), 188-199.

LORI L. MOORE is an Assistant Professor in the Department of Agriculture and Extension Education at the University of Idaho, 1134 West 6<sup>th</sup> Street, P.O. Box 442040, Moscow, ID 83844-2040. E-mail: [lmoore@uidaho.edu](mailto:lmoore@uidaho.edu)

RICK D. RUDD is an Associate Professor in the Department of Agricultural Education and Communication at the University of Florida, P.O. Box 110540, Gainesville, FL 32611. E-mail: [rdudd@ufl.edu](mailto:rdudd@ufl.edu)