

PERCEIVED SUPPORT AND CHALLENGES FACED BY EXTENSION
SPECIALISTS AND EDUCATORS

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PERCEIVED SUPPORT AND CHALLENGES FACED BY EXTENSION
SPECIALISTS AND EDUCATORS

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and hereby certify that, in their opinion, it is worthy of acceptance.

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To all of my family, friends, colleagues and mentors that
helped me along the way, I dedicate this work.

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
LIST OF ILLUSTRATIONS	vi
LIST OF TABLES	vii
ABSTRACT.....	ix
Chapter	
1. INTRODUCTION	1
Background and Setting	
Framework	
Statement of the Problem	
Purpose and Objectives	
Definition of Terms	
Limitations of the Study	
Basic Assumptions	
Need for the Study	
2. REVIEW OF LITERATURE	10
Introduction	
Role of Cooperative Extension	
Diversity in the Workforce	
Adversity in the Workforce	
Mentoring in Organizations	
Formal and Informal Mentoring	
Mentors and Protégés	

Mentoring and Gender Pairing	
Agriculture Education in Extension	
Organizational Culture	
Summary	
3. METHODOLOGY	31
Purpose and Objectives	
Research Design	
Population	
Instrumentation	
Data Collection	
4. FINDINGS	35
Introduction	
Demographics of the Research Respondents	
Objective One: Job Satisfaction	
Objective Two: Level of Support	
Objective Three: Barriers	
Objective Four: Mentorship	
5. DISCUSSION.....	67
Summary	
Major Findings	
Discussion, Implications and Recommendations	
Recommendations for Future Research	

APPENDIX

A. RECRUITMENT LETTER	77
B. INSTRUMENT.....	78
C. REMINDER LETTER.....	90
REFERENCES	91

LIST OF ILLUSTRATIONS

Figure	Page
1. Levels of Culture.....	5

LIST OF TABLES

Table	Page
1. Population Categories	32
2. Respondent Program Area	36
3. Respondent Age Range	38
4. Respondent Salary Range	39
5. Work Hour Range	40
6. Family Hour Range	41
7. Job Satisfaction	42
8. Level of Satisfaction	43
9. Morale	44
10. Level of Morale	45
11. Level of Support	46
12. Level of Challenge	48
13. Significant Challenges	50
14. Contacting Colleagues	51
15. Preferred Mean of Contacting Colleagues	52
16. Structured Mentoring	53
17. Self-Sought Mentoring	54
18. Encouragement/Support for a Female Colleague	55
19. Encouragement/Support for a Male Colleague	56
20. Received Encouragement/Support from a Female Colleague	57
21. Received Encouragement/Support from a Male Colleague	58

22. Have Been Discouraged by a Female Colleague	59
23. Have Been Discouraged by a Male Colleague	60
24. Discouraged a Female Colleague.....	61
25. Discouraged a Male Colleague	62
26. Professional Mentor	63
27. Professional Protégés	64
28. Provide Regular Mentoring.....	65
29. Receive Regular Mentoring	66

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ABSTRACT

Organizational culture plays a part in the day-to-day atmosphere encountered by educators within the Extension organization. Many factors influence the culture including perceived job satisfaction, morale, support and barriers. The initial guidance of this study was based on work by Fosters and Seevers (2003) that reviewed the barriers women face in agricultural and Extension education, as well as the lack of mentoring networks and support groups. The purpose of this research was to measure the level of perceived barriers by Extension educators and the perceived effectiveness of available support programs. The survey population consisted of 224 University of Missouri Extension specialists and educators, and used an internet-based survey questionnaire.

Respondents were somewhat satisfied with their current Extension position. However, they were neutral in the level of morale they encounter from colleagues in their current Extension position. Male and female respondents reported a greater level of support from family, local clientele and the county than from regional and state Extension. Both male and female respondents identified salary and promotion, as well as balancing work and family, as the most significant challenges in their current Extension role. Respondents did not perceive significant challenges with engagement from producers and clients based on gender, length of service or the educator's practical background. When questioned about mentoring support, respondents perceived

self-sought mentoring as more effective than assigned formal mentoring. A majority of the respondents reported encouraging both male and female colleagues as well as receiving encouragement and support when faced with work related challenges. A majority of the respondents reported they had not discouraged or been discouraged by either male or female colleagues when faced with work related challenges. Data showed that the percentage of same gender mentors and protégés was similar for both male and female Extension educators.

Based on this research, studies may be conducted in each Extension program area to determine barriers specific to each category and the type of support necessary for personal and professional development. Extension administration may need to determine how to reduce the perceived disconnect between field, regional and state faculty, and how to potentially enhance employee orientation. With periodic assessments, the Extension organization can continue to be a leading institution in adult and youth education.

Chapter One

Background and Setting

Adult education has always been valued in American agriculture and the Cooperative Extension System has served as the largest institution for that education over the years (Franz, 2007). With the passage of the Smith-Lever Act in 1914, an education system was created whereby extension agents demonstrated agricultural technology from land-grant universities to the common man. Adult education in the early 1920s and 1930s was promoted by visionaries such as Seaman Knapp, who believed the mission of extension and adult education was to improve the lives of farm families, benefiting society as a whole. The United States was primarily an agrarian society in the early 20th century. An extension agent's purpose was to educate adults who would then teach their children a better way of life and Seaman Knapp's concept of demonstration farm work contributed to the beginning of self-improvement for rural America (Martin, 1921). Adult learning through extension education is still as important today as it was over 100 years ago. Extension program areas have grown to include business and industry, youth education, community development, agriculture and natural resources as well as nutrition and health. According to the National Institute of Food and Agriculture (n.d.), the vital and practical information produced by universities can be disseminated to agricultural producers, small business owners, consumers and families through extension. Adults learning in nonformal settings may not receive actual certifications or degrees, but the value of the education itself is still vital to their businesses and lives (Dvorak, 2014).

County program work requires Extension staff, both male and female, to be able to assess educational needs of the geographic area and conduct workshop sessions or

provide materials to meet those needs (Cooper & Graham, 2001). Extension educators must be able to stay abreast of changes happening socially, environmentally and economically throughout the world. Barriers such as time, age, lack of resources and funds, communication gaps between field, regional and state faculty members as well as absence of training and clarification of job expectations may be experienced regardless of gender. Furthermore, new employees must be provided support in order to develop skills necessary to meet the needs of their clientele. This support can take many forms from workplace attitude and culture to interaction with mentors.

Traditionally, Extension has been a male dominated field. Over the years there has been an increase in women educators in the workforce. Women educators serve the community through a wide variety of program areas including agriculture, human environmental sciences, business, community and youth development and continuing education (University of Missouri Extension, 2013). Women can face many challenges in the workplace, especially in the male-dominated industry of agriculture. In the 2012 Census of Agriculture, there were 969,672 women farm operators, almost 150,000 more than reported in 2002 (Census of Agriculture, 2002). Sara Schafer (2012) reports that women are more involved in production agriculture because business management is becoming increasingly important in production management. However, women are often not seen as experts in the knowledge of agriculture and are therefore not frequently seen as a source for agricultural education (Trauger et al., 2008). Nationally, 11.4% of extension agriculture specialists and educators are female and nearly 60% have dealt with hurdles or confrontations in their career due to gender (Seevers & Foster, 2004). Women educators face obstacles including a lack of commitment from directors and

administrators, struggling with clients who are not willing to work with female educators and a “lack of specific goals and targets for attaining a diverse workforce” (Foster & Seevers, 2003, p. 33). Traditionally, there have been few women in agricultural education and even fewer women role models in elevated academic positions. These issues may compound challenges women face in the agriculture education industry.

Mentoring is seen as a critical part of career success for an individual. Organizational, administrative and clientele expectations can be overwhelming, so a successful mentoring relationship can provide the guidance needed for new employees (Place & Bailey, 2010). Many Extension programs use mentoring as a means for orienting new educators and aiding them in understanding the complex network that makes up Cooperative Extension (Zimmer & Smith, 1992). Mentoring is an essential tool for women to advance in their careers and the gender of the mentor has been considered a factor in how quickly they progress within the business (Tharenou, 2005). Thus, the process of mentoring is vital to the development and retention of women in extension educator positions.

Research conducted by Foster and Seevers (2003) found three common themes, “1) Women in the field who feel encouraged seem to be happy and have a strong commitment to their role in the profession; 2) Mentoring networks and support systems are too few and do not meet the needs of the women in the field; and 3) Barriers to women in the profession are real and need to be addressed” (pp. 35-37). These themes were expressed by researchers in 2003. After 13 years of social movement, it appears these themes may still be an issue for women educators in Extension. All educators face

challenges and the support received is a direct product of the organizational culture that is present.

Framework

The conceptual framework for this study is based on organizational culture as proposed by Edgar H. Schein, *Organizational Culture and Leadership* (1992), and shares insight into the differing levels of behavior within an organization as it strives to operate successfully and for the good of all members. Schein's illustration, *Levels of Culture* (Figure 1), describes the first level of organizational culture as Artifacts. This level consists of the more visual aspects of an organization including the design of the office area (architecture, layout), perceived dress code, how members interact with each other and any value statements displayed. Artifacts are easy to see but more difficult to describe because the observer tends to interpret these aspects based on their own background experience. A new employee may gain some knowledge into an organization's culture through an orientation/mentoring program, but much of this beginning knowledge will be from the Artifacts level.

Uncovering the Levels of Culture

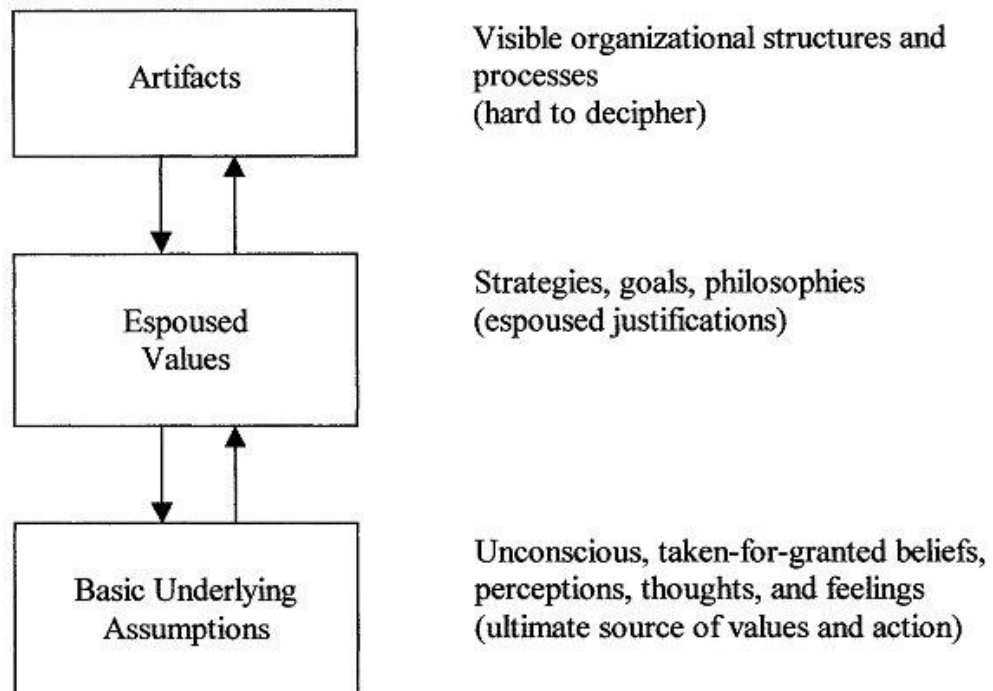


Figure 1. Levels of Culture (Schein, 1992).

Schein's Espoused Values level describes an organization's shared experiences that have proven to be successful, consistently, based on a member or leader's values. Espoused values are often the foundation of an organization's culture and are used to create a company-wide code of conduct that is usually closely aligned with the organization's mission statement. Organizations may promote these values at venues such as seminars or annual conferences as a way to reinforce company standards.

Schein's third level of an organization's culture is labeled as Basic Assumptions. When solutions to problems work consistently, they tend to be accepted as the "normal" way for business to be conducted and are shared with the next generation of group members. Basic assumptions are generally not confronted or debated upon and,

therefore, may be difficult to change. Challenging basic assumptions within an organization may cause anxiety and discomfort among members and disrupt the general overall feeling of unity and well-being. A successful leader recognizes when dysfunction occurs within an organization and understands how to assess all levels of an organization's culture in order to deal with the discomfort when challenges arise.

Statement of the Problem

The initial guidance of this study was based on the work conducted by Foster and Seevers (2003). The three themes from the authors' study included, "1) Women in the field who feel encouraged seem to be happy and have a strong commitment to their role in the profession; 2) Mentoring networks and support systems are too few and do not meet the needs of the women in the field; and 3) Barriers to women in the profession are real and need to be addressed." (Foster & Seevers, 2003, pp. 35-37). Nationally, 11.4% of all Extension agriculture specialists and educators are female and nearly 60% have dealt with hurdles or confrontations in their career due to gender (Seevers & Foster, 2004). Based on personal experience as a new, young female Extension educator, the researcher sought to determine what barriers Extension educators in the 21st century face in their careers and what support is in place to aid in career success.

Purpose and Objectives

Foster and Seevers (2003) asked the question, "If women have experienced these barriers at entry to mid-level positions in agricultural and extension education, the question becomes *Why do they attempt to move forward?*" (p. 33). The purpose of this study was to understand the type of barriers, if any, that hinder Extension educators in the

21st century and the support system that may be in place in overcoming those barriers.

The objectives for this study included:

1. Describe extension educators' level of job satisfaction.
2. Describe the level of support perceived by extension educators.
3. Describe the perceived barriers extension educators face.
4. Describe the level of mentorship in place for extension educators.

Definition of Terms

For the purpose of this study, the following definitions were used:

Cooperative Extension System: The Cooperative Extension Service, established in 1914, is "active in rural, urban and suburban communities and in addition to agricultural and home economics programs, offers programs in social and economic problems and cultural, recreational, and leisure-time activities" (United States Government Accountability Office, 1981, "Cooperative Extension Service's Mission", para. 1). The goal of Extension is to provide producers with research-based information that aid in making their production operations profitable and successful (United States Government Accountability Office, 1981).

Farm Operator: According to the Census of Agriculture (2012b), farm operator can be defined as, "The hired manager is considered the farm operator, and the farm is classified with a tenure type of "full owner" even though the hired manager owns none of the land he/she operates." (p. B-9).

Mentor: Mentor has been defined as: "an individual influential in the work environment who has advanced experience and knowledge and who is committed to providing upward mobility and support to careers." (Ragins & Scandura, 1994, p. 962).

Protégé: an individual, new to a job that seeks career and personal support from a more senior member of an organization (Place & Bailey, 2010).

Limitations of the Study

Only Missouri affiliated Extension specialists/educators were used in this study. Generalizing to populations from other states and other educational categories is cautioned.

Basic Assumptions

It is a basic assumption that participants answered the questionnaire honestly and that all participants had a basic understanding of mentorship.

Need for the Study

Agriculture is mainly a male-dominated industry. Data from the United States Department of Labor (2015) reflects the low number of women in the agricultural labor force. Women as farmers, ranchers and other agricultural managers comprised only 23.9% of the total labor force for those occupations. Data values for agricultural occupations that have a base of less than 50,000 total male and female employed, showed no measurable percentages of females in agricultural engineering, agricultural and food scientists and technicians, agricultural inspectors and animal breeders. Within Extension from 1914 to 2016, the University of Missouri has had one female in the position of Director of Cooperative Extension. Gail Imig served a four-year term from 1987 to 1991. Today, an increasing number of female extension educators strive to be successful in the broader industry of agriculture. For organizations to maintain healthy, productive cultures, periodic assessments need to be conducted to determine what challenges employees face and if support systems are meeting the needs of those employees. For

educators to achieve successful careers as agriculture educators, mentoring programs can provide tools to help overcome barriers that may be experienced when working with clients and peers. This research is needed to understand the type of barriers, if any, that hinder Extension educators in the 21st century and the support system that may be in place in overcoming those barriers. Findings from this study may provide the University of Missouri Extension, and other land-grant universities, with insight into barriers to be aware of and data to use as guidelines for evaluating, creating and/or restructuring support programs such as mentoring, mentor training and Cohort orientation. Cooperative Extension's purpose is to provide research-based information to the general public. Faculty and staff that receive quality support make for more satisfied employees and help sustain the organization's culture and purpose.

Chapter Two

Review of Literature

Early American agricultural education has its origins in agricultural societies or farmer's institutes. These institutes were founded for the sharing of agricultural knowledge among American farmers and were patterned after teachers' colleges. Regular meetings were organized and lectures were given by professors from agricultural schools (Moss & Lass, 1988). Federal legislation passed in the late 1800s began to target the need for adult education in rural America. The Morrill Act of 1862 allowed federal funds to be used for the donation of public lands to states, for the creation of land-grant universities. The focus of these institutions was dedicated to the research in agriculture and mechanical arts (Association of Public and Land-grant Universities, 2012). Following the passage of the Morrill Act, the Hatch Act of 1887 created agricultural research stations to work in conjunction with land-grant universities. The purpose of these research stations was to conduct experiments, contributing to the advancement of the agricultural industry and the improvement of the rural home and life (National Institute of Food and Agriculture, 2008).

In 1914, the Smith-Lever Act created the Cooperative Extension education program. Extension education was the connection between the agricultural experiment stations, land-grant universities and the common man. Extension educators provided instruction to farmers about the latest research developments intended to improve agricultural existence on the family farm (Association of Public and Land-grant Universities, 2012). By conducting demonstrations, extension educators were able to teach adults how to improve their farm management practices and overall profitability.

The philosophy of the cooperative demonstration program was “to reform agriculture and make it an occupation of profit and pleasure, to improve rural conditions, to broaden and enrich rural life and to make the farm attractive and country residence desirable.”

(Martin, 1921, pp. 13-14).

Role of Cooperative Extension

The Cooperative Extension mission is “to enable people to improve their lives and communities through learning partnerships that put knowledge to work” (Dvorak, 2014, p. 1). Adult learning through extension education is still as important today as it was over 100 years ago. According to the National Institute of Food and Agriculture (n.d., “Extension”, para. 2), “Through extension, land-grant universities bring vital, practical information to agricultural producers, small business owners, consumers, families, and young people.”. Adult audiences bring experience and education with them to the learning table. Extension educators need to consider prior experiences of the learner and how to present information so the adult learner benefits from educational programming. Adults seek knowledge and are more likely to learn when the material applies to a specific situation in their lives (Dvorak, 2014). If educators knew ahead of time the learning styles of their audience, they could potentially improve program outcomes (Honeyman & Miller, 1998). “Adult educators must step out of their common teaching comfort zone and vary their teaching techniques during their educational programs in order to engage all styles of learners.” (Dvorak, 2014, p. 4). When working with adults in agriculture, Extension educators need to consider how much experience the farmer already has and the farmer/landowner’s level of education (Franz, Piercy, Donaldson, Westbrook, & Richard, 2010). Adults starting their own farms prefer experiential

learning, problem-solving and critical thinking skills and feel that “lifelong learning and continuing education were important in the development of their farming careers” (Trede & Whitaker, 2000, p. 39). Franz et al. (2010) found 99% of producers preferred to learn hands-on and 96% by demonstrations. It is important that effective educators continually work to improve their teaching methods (Seevers & Foster, 2004). As women try to advance in their careers in agricultural education and other non-traditional areas of work, they can sometimes face barriers on the way to the top (Seevers & Foster, 2003). These barriers may hinder the individuals level of satisfaction and satisfactoriness, therefore reducing the possibility of tenure.

Diversity in the Workforce

According to data from the United States Bureau of Labor Statistics (2015), average weekly earnings of full-time female wage and salary workers are approximately 83% of male workers in the same occupation. Statistics compiled in a 2014 report show that, while the percentage of earnings by female workers rose from 62.1% in 1979 to 81.6% in 2014, women still earned less than men in the same occupation regardless of age, gender or race and ethnicity. Black and Hispanic women had average incomes that were 90 and 89%, respectively, of men within the same race and ethnicity; White women had earnings that were 82% of white males and Asian women ranked the lowest with 78% earnings as compared to Asian males in the same occupation. Women between the ages of 35 and 64 had the highest weekly wages at \$780, but were still less than males of the same age group who earned \$1,011 for the same time period. Women are more likely than men to work in professional and related occupations such as education and health care. A 2009 report from The Economics Daily shows that 68% females and 29% males

worked in professional occupations including education and health care; but while the number of female workers is more than twice that of males, these female professionals earned only \$818 per week as compared to \$1,020 for their male counterparts.

The Institute for Women's Leadership compiled statistics on the diversity of men and women educators in higher education in New Jersey and across the nation. Data showed that among educators in colleges and universities nationwide, women held only 24% of the full professor positions as compared to 76% males with the same titles. As the seniority of the positions decrease, the gender gap percentages also decrease. Percentage numbers for Assistant Professors for males and females are 55 and 45, respectively, but for educators with titles of Instructors or Lecturers, the percentages actually place females ahead of males by 52 to 48%, respectively (Rutgers Institute for Women's Leadership, 2007).

Adversity in the Workforce

Some women educators face obstacles such as stereotyping by male colleagues, potentially being left out from receiving pertinent information, meeting the expectations of directors and co-workers in order to gain acceptance and not having the years of experience as other established employees (Seevers & Foster, 2004). Women educators may face obstacles including a lack of commitment from directors and administrators, struggling clients who are not willing to work with female educators and a "lack of specific goals and targets for attaining a diverse workforce" (Foster & Seevers, 2003, p. 33). Barriers faced by women educators disrupts the flow and relationships demonstrated in Figure 1. The Women's Bureau (2007) defines non-traditional areas of work as "those in which women comprise 25% or less of total employed." The

agricultural industry has few support groups and mentorship programs some women need in order to be successful (Harden, 2015). As women reach tenure and try to advance in their careers in agricultural education and other non-traditional areas of work, they can sometimes face barriers on the way to the top (Seevers & Foster, 2003). Baxter, Stephens and Thayer-Bacon (2011) concluded that female agriculture educators in public school systems felt they had to prove themselves as competent educators, and that some community members believed that farming should not be taught by women. Even though women educators face many hurdles their male counterparts do not, 90.5% of women feel comfortable with the responsibilities that come with their current position and 85% feel as though they are prepared to teach the subject material (Seevers & Foster, 2004). The feeling of satisfaction is a component of work adjustment where an individual and environment, in this case the workplace, strive to meet the requirements of each other. The individual seeks to meet the requirements of the environment by providing job skills and, in turn, the environment provides certain requirements needed by the individual, usually in the form of rewards, compensation or promotion. If this correspondent relationship continues to benefit both the individual and the environment, the relationship can result in tenure of the individual. If requirements are not met by either the individual or the environment, the stability of the relationship dissolves which may lead to the individual leaving the work environment and seeking employment elsewhere. When the needs of the individual are met by the environment, the individual is said to have achieved a level of satisfaction. Satisfactoriness is the level of satisfaction the work environment has with the individual and their performance (Dawis & Lofquist, 1984). Women educators can provide skills necessary to meet the requirements of the work

environment. When the environment is predominantly male, support systems should be in place to aid female educators in overcoming potential barriers from clients and peers. Over the past 50 years, women have made great strides in career advancements, but still have difficulty breaking through the barrier into upper level management and education administration. This kind of invisible barrier has been called the glass ceiling and defined as the “unbreachable barrier that keeps minorities and women from rising to the upper rungs of the corporate ladder, regardless of their qualifications or achievements” (United States Department of Labor, 1995, p.1).

Mentoring in Organizations

Organizational mentoring is a tool that has been shown to be successful in making a crack in the glass ceiling and has the capability of enhancing the success of female educators in reaching and maintaining tenure (Blake-Beard, 2001; Gibson, 2004). The concept of mentoring has been in existence for many years. Over time, the term “mentoring” has come to mean the education and personal development of an individual by an older, experienced person (Mincemoyer & Thomson, 1998). Mentoring programs have been an effective tool in creating strong business cultures which help promote employee performance and motivation, overall business retention rates and increased productivity. A strong business culture helps ensure the long-term health of an organization and its continued existence, promotes loyalty and improves the communication structure among personnel (Wilson & Elman, 1990; Ehrich, Hansford & Tennent, 2004). Studies have indicated that mentoring provides both the mentor and protégé with opportunities for improved skills, career development and personal growth (Ehrich, Hansford & Tennent, 2004). Organizations must actively participate in

mentoring programs by providing training and education for mentors and protégés, and constantly evaluate the process if relationships warrant intervention, help or correction by mentoring program coordinators (Inzer & Crawford, 2005). Wilson and Elman (1990, p. 93) state that mentoring “is simply the best method of passing along the norms, values, assumptions, and myths that are central to an organization’s successful survival.”

Formal and informal mentoring

The framework for mentoring may be formal or informal. Formal programs are governed by the organization, pairing a mentor to a protégé and are usually set for a requisite period of time. Mentors may be selected by a program director, based on their skills, and have a specific set of goals to achieve with the new trainee (Blake-Beard, 2001; Ragins & Cotton, 1999). Ehrich, Hansford and Tennent (2004) report that some formal programs train mentors, set specific locations and frequencies of meetings and require an evaluation to be completed at the end of the mentoring period, while other formal programs are not so rigid. In some instances, formal mentoring programs may not be as successful as informal programs. Studies indicate that programs that limit the time between mentors and protégés are less effective in terms of overall program success. Contact between the mentor and protégé should occur several times a month, whether electronically or in face-to-face meetings. Pairing the protégé with an upper-level, nonsupervisory employee may also not be as effective as pairing with someone closer in the organizational hierarchy, someone the protégé may see periodically through regular work programs (Inzer & Crawford, 2005). Informal mentoring relationships occur without guidelines and develop more on mutual interests and the career needs of both the mentor and protégé. Without the issue of a timeline, informal mentoring slowly builds

career development and psychosocial functions such as self-efficacy and personal development (Ragins & Cotton, 1999). These relationships can be initiated by either the mentor or protégé and may last for several years. Informal mentors provide positive actions such as role modeling, friendship, counseling and encourage social interactions with other faculty. Protégés were more satisfied with informal mentors and received greater career-related support than those who were paired with formal mentors (Inzer & Crawford, 2005; Ragins & Cotton, 1999). Organizations should not rely on formal mentoring programs alone for personnel development, but rather institute a partnership with informal mentoring relationships to ensure a successful business future (Ragins & Cotton, 1999).

Mentors and protégés

Within an organization, mentors play an important role in the teaching and developing skills in new employees. Mentors act as role models, providing guidance through the network of organizational politics and advice on day-to-day issues on company policies. Mentors are often in a position to hear when there may be trouble within the ranks and may serve as a point of information in the business structure. A mentor's purpose is not to share confidential information, but they often notice early warning signs of unrest in the lower levels of an organization. Conversely, when there is "hidden talent" that is overlooked, mentors have the ability to draw out this talent when an employee may be lacking in confidence or the ability to effectively communicate (Wilson & Elman, 1990). Mentors create an informal link between the protégé and organizational expectations and are instrumental to the success of the mentor/protégé relationship by supporting and challenging their protégés (Zimmer & Smith, 1992).

Choosing a good mentor is essential to the success of the overall mentoring program and organizational goals. Mentors should have a sincere desire to teach and develop both the professional and personal lives of new colleagues. Mentors should have strong technical and organizational knowledge, as well as skills in understanding the steps necessary in becoming a successful educator, especially in educational organizations such as Cooperative Extension. Choosing mentors who are often close to the protégé within the organizational network can provide a sense of common ground and shared experiences that set the basis for a successful mentoring relationship. Patience, caring, openness and a positive attitude are all characteristics necessary for being a successful mentor. Mentoring should be a voluntary relationship, not a forced requirement based on hierarchy level within an organization. Immediate supervisors are not often suitable for mentoring positions due to the fact that judging aspects in a supervisory capacity can often undermine open and meaningful communication between the mentor and protégé. Likewise, personnel who are not secure in their positions or have a negative attitude or experiences are also not good candidates for mentoring duties. Successful mentoring within the Extension organization provides new employees the knowledge of “how to find and build relationships with important clientele in the community. . .learning technical information about their program area, learning how to develop an advisory committee, and gaining knowledge on creating systems to effectively report on their plans of work (POW) and reports of accomplishment (ROA).” (Place & Bailey, 2010, “Objective One”, para. 2). Protégés also play an important role in the mentoring relationship. Similar to the role of a follower in a leadership relationship, protégés should be active participants, open to communicating with a mentor and be prepared to provide

feedback when discussing issues during mentoring events. Protégés should be willing to conduct some degree of self-study and not expect their mentor to provide all of the answers. A successful mentoring program includes not only a qualified mentor, but also a protégé that takes the initiative to help guide the career development process (Inzer & Crawford, 2005).

“A knowledge-based organization such as Extension must have effective processes in place to continually develop its intellectual capital.” (Place & Bailey, 2010, “Background”, para. 1). Studies conducted on the Pennsylvania State Cooperative Extension mentoring program concluded that successful programs were more likely to occur when contact between the mentor and protégé was made as soon as possible after the employee was hired, this is typically exhibited during the initiation phase of the mentoring relationship. Programs were also more successful when the mentors and protégés created a peer-like friendship where protégés felt comfortable contacting their mentor for support and knowledge on program development or subject information (Mincemoyer & Thomson, 1998). As stated earlier, pairing mentors with protégés within the same programmatic area contributes to a more successful mentoring relationship. Other factors that add to that success include pairings within the same geographic area which allows for more frequent contact between participants whose offices are situated closely. It was also noted that protégés were more comfortable with mentors who were not direct supervisors because questions could be asked without the protégés feeling like they were being looked down upon for asking what may seem to be uneducated questions (Place & Bailey, 2010). Paired mentors and protégés should have similar values and career goals, since the development of skills and knowledge is based on mutual trust

within the relationship. Without trust, mentoring programs will not succeed no matter the level of guidance or structure set in place (Inzer & Crawford, 2005). As the mentor and protégé enter the last phase of mentoring, the transformation stage, the relationship has “transformed” into a more peer-like relationship with less emphasis on new employee development (Mincemoyer & Thomson, 1998).

Mentoring and gender pairing

Much has been studied about the effects of gender on mentoring relationships and how it affects career advancement potential for women in education and other professions. Studies have compared same-sex and cross-sex mentoring and how women benefit, or not, as far as promotions, compensation and psychosocial functions. Psychosocial functions in mentoring address the aspects of the protégé’s personal development, sense of competence and self-confidence, and depends on the quality of the emotional and personal relationship between the mentor and protégé. Protégés in cross-sex, formal mentoring relationships reported receiving more challenging assignments from their mentors than those engaged in informal relationships (Ragins & Cotton, 1999). Ragins and Cotton (1999) concluded that female protégés that were paired with female mentors were more likely to socialize in after-work activities than female protégés with male mentors. An explanation for this finding was that female protégés were reluctant to participate in after-work social events for fear that the interaction may be misinterpreted as sexual in nature. These studies also concluded that male protégés with female mentors reported less psychosocial functions and less satisfaction from their mentors with regards to professional development.

Pairing same gender mentors and protégés may aid both the new employee and employer by providing an environment that is more appropriate to the learning patterns of the employee. Baxter concluded that the learning patterns of men and women, in academic studies, showed a difference in relation to gender. Women in their early academic careers were more likely to rely on listening and recording as the preferred method of learning, and valued peer support and evaluations as a means of demonstrating their knowledge. Men, on the other hand, preferred to take a more public role in learning by increased participation in class and preferring interactions with peers in the forms of debates and quizzes. As their academic careers advanced, women continued to use peers as a means of support and valued a positive rapport with instructors. Men continued to prefer individual independent thinking and being challenged by peers and instructors. As these men and women reached the end of their academic careers, the differences in knowing were less noticeable (Baxter, 1992).

Ragins and Scandura (1994) state that mentoring relationships are greater for women than men because the type of relationship meets the developmental needs of female employees and also follows the gender expectations for women. Findings in a study by Gibson (2004) concluded that female protégés viewed support from their mentors as different from colleague support. They believed their mentors were genuinely interested in their (protégés) progress and success, while colleagues were perceived as not having the same level of interest and generally did not initiate communications.

Studies from the 1990s suggest that women encounter more gender discrimination, an absence from the male managerial hierarchy and a lack of networking opportunities that aid career advancement. It has been found that protégés, both male and

female, of male mentors received more career advancement opportunities than those of female mentors because male mentors had more advancement connections and power in organizations than women. Because of the organizational structure and the nature of men's role in that structure (tenure and gender roles), male employees appear to need mentor career support less than female employees. Male protégés still benefitted having from male mentors, but female protégés appear to benefit the most from having male mentors (Tharenou, 2005). Results from pairings of male protégés with male mentors showed no increase mentoring functions such as challenging assignments, but these results did show an increase in compensation efforts. It is interesting to note that, while having a male mentor greatly benefited the female employee, as far as career advancement, male mentors were not necessarily able to shield their protégés from biased compensation decisions. Having a male mentor does not necessarily ensure advancement and higher wages for women since these issues act as independent events of each other within an organization.

Male protégés with female mentors reported that their mentors were less likely to give challenging assignments and introduction within the organization, which suggests that while female mentors may be giving the same level of support as male mentors, they are still perceived as providing insufficient guidance and support needed by male protégés (Ragins & Cotton, 1999). Previous findings report that female protégés with male mentors receive the greatest level of career development. However, Tharenou (2005) states that the best mentor relationship for a protégé is with a mentor of the same sex, that female mentors are better equipped to offer strategies to female protégés for overcoming barriers in career development and the workplace. This study seems to be in

opposition to conclusions on other gender mentoring studies conducted in the past 10 years.

Formal and informal mentoring programs are tools that may help create successful organizational cultures and ensure employee success and tenure. Mentors should have a strong desire to teach and have an understanding of the skills necessary for becoming an educator within organizations such as Extension. Successful mentoring relationships are more likely to occur when mentor and protégé are geographically close, within the same program area and are able to establish a relationship based on trust and mutual interests. There is differing opinions about the success of same-sex and cross-sex mentor/protégé pairing. Some researchers contend that same-sex pairing provides more positive personal and professional development by providing an environment that is more appropriate to the learning patterns of the protégé. Some researchers believe female mentors are better equipped to offer strategies to female protégés for overcoming barriers in career development and the workplace. However, other studies have shown that male and female protégés have better career opportunities when paired with male mentors, because male mentors have more advancement connections and power with organizational hierarchy, especially in male-dominated industries such as agriculture. Successful mentoring programs require periodic assessment to determine if the needs of the mentor and protégé are being met. Organizations should have effective processes in place to continually develop a strong business culture, thus ensuring the long-term health of the organization and its continued existence.

Agriculture Education in Extension

A Seevers and Foster (2003) study showed that the number of women in agricultural and extension education serving as mentors to other female employees, or that had female mentors themselves, was relatively low. None of the participants reported having a formal female mentor, another educator formally assigned by administration. Some participants reported that if mentoring took place, it was on an informal level in situations such as short gatherings at professional meetings.

Participants in the study expressed, “(I am in a) very male dominated department. Men offer little or no help, show little concern for the well-being of females – Seem to tolerate us, but that’s about all.” and “My male counterparts do not know how to mentor a younger female. They could use a workshop on mentoring.” (Seevers & Foster, 2003, p. 36).

Seevers and Foster (2004) also conducted a study that examined the profiles of female agriculture extension educators. With most participants between the ages of 26-50, the authors noted there was a drop between ages 31-40 which was likely due to the years when women were typically raising children. One woman was quoted as saying, ‘It’s very difficult during pregnancy or with young children.’ (Seevers & Foster, 2004, “Findings”, para. 9). Other barriers participants experienced included the lack of female role models, acceptance by male colleagues and clients, the “need to prove yourself”, and even the personal attitude of “not being good enough” (Seevers & Foster, 2004, “Findings”, para. 8-9). These are the same barriers voiced by women in the workplace more than 20 years ago.

Sixty-eight percent of the women studied had a master's degree in some area of agriculture with the majority rating their degree of program knowledge on the Prepared level. Seevers and Foster (2004) reported that a significant number of women responded that many sacrifices had been made in order to achieve their current level of career development. Responses varied from low pay for the level of education required, time away from family or delaying the decision to have a family and the lack of personal time. In spite of the barriers and sacrifices made, almost 85% of the participants reported being very satisfied to satisfied with their careers as Extension agriculture educators. Are these sacrifices more common for women agriculture educators or indicative for women in all program categories with the extension system? Are male extension educators making the same sacrifices that female educators are reporting? These questions bring up the validity for continued studies concerning extension work and barriers perceived by all employees.

Organizational Culture

All of the support and challenges defined are the direct and indirect products of the organizational culture. It is a reciprocal process where culture influences expectations and actions impact culture. Extension has had a rich history and brings a storied culture as previously described. The organizational culture can be conceptualized using seminal work from Edgar H. Schein. Schein (1992) shares insight into the differing levels of behavior within an organization. There are three levels of culture within an organization (Figure 1).

Uncovering the Levels of Culture

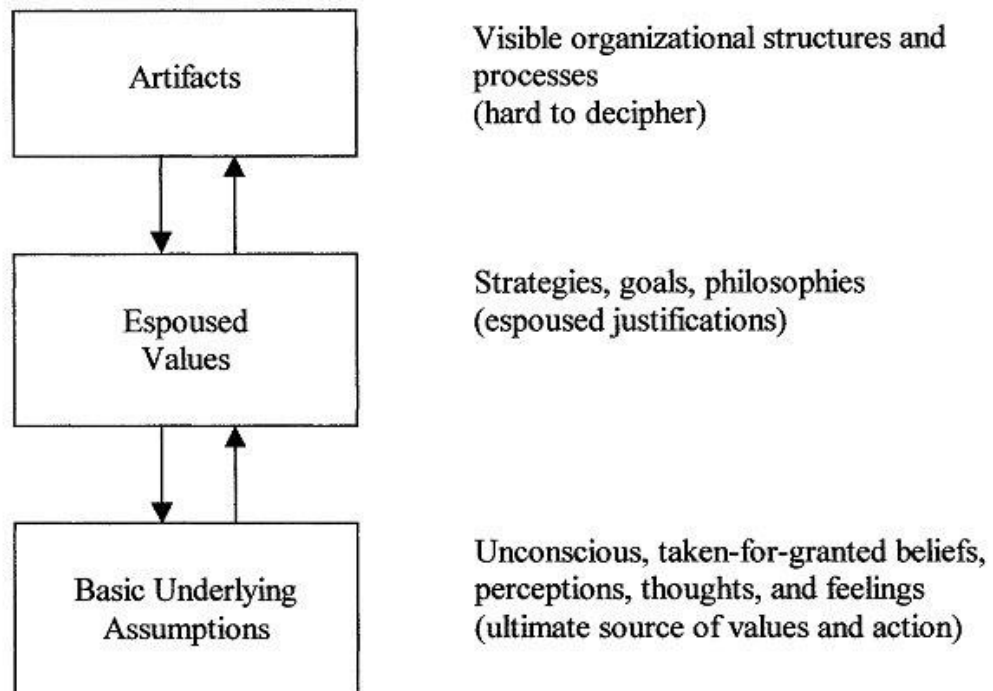


Figure 1. Levels of Culture (Schein, 1992).

The first level of organizational culture is described as Artifacts. This level consists of the visual aspects of an organization that can be seen by everyone involved. Artifacts are easy to see but difficult to describe because the observer will interpret the artifacts based on their own previous experiences. Level two is titled Espoused Values which describes an organization's shared experiences and values. Espoused values are often the foundation of an organization's culture and can often be seen captured within the organization's mission statement. Basic Assumptions is the third level of organizational culture purported by Schein (1992). When organizational actions work consistently, they are accepted as the "normal" way of business transaction. Basic assumptions are generally not challenged and are often difficult to change. All three

levels make up the organizational culture that is part of the day-to-day atmosphere encountered by everyone involved in the organization.

Summary

Cooperative Extension has been in existence for over 100 years. What began as a program for educating the common man has evolved into an institution for teaching business and industry, youth education, community development, agriculture and natural resources and nutrition and health to people of all ages. Extension agents were hired in the early 1900s to teach research-based information from land-grant universities for the purpose of improving the lives of rural Americans. Soil health, home canning, crop production, financial management and home improvement were common topics extension agents shared with farm families. Men and women extension agents often made home visits, teaching skills with a hands-on approach to individuals and local clubs, using learning-by-doing education methodology.

As an increasing number of women began working outside the home, barriers in the workplace became more obvious. In addition to outside employment, women were also expected to maintain their role as primary caregivers of the family and household. It was not common practice to see a woman employed in a managerial position; more women were employed as secretaries, housekeepers or other positions considered female-oriented with little opportunity for advancement. As society continued to evolve during the latter part of the 20th century, studies began focusing on the barriers women and other minorities faced in employment and the strategies necessary for overcoming those barriers. Theories such as workplace adjustment concluded that when the needs for both the individual and environment are met, the result is more likely to lead to tenure for

the individual. With more women entering what was traditionally male-oriented industries, businesses and organizations began to see the need for support programs that met the needs of female employees, thereby increasing the potential for tenure and employee retention. The lack of role models readily became apparent as a major barrier for advancement opportunities within many organizations.

Mentoring programs were and continue to be used as a resource, providing role models for new employees learning skills for career as well as personal development. Experienced personnel, acting as mentors, provide not only job training but also guidance as new employees begin to learn the political infrastructure of an organization. Successful mentoring relationships are more likely to occur when mentor and protégé are more closely linked in the organizational network. Combining the structure of a formal mentoring program along with more peer-like informal relationships often creates a healthier, more successful business culture, increases job retention, and employee satisfaction.

Comparisons have also been made on the role gender plays in the success of mentoring relationships and overall career and personal development. Studies in 1999 by Ragins and Cotton have shown that for psychosocial development, same-sex mentoring relationships prove to be the more successful for women protégés. This concept coincides with Baxter's study in 1992 which states that men and women have differing learning patterns and that women are more likely to seek support from peers and value evaluations as demonstrations of learned knowledge. Female protégé with female mentors tend to socialize more outside of the workplace and some authors such as Tharenou state that female mentors are better equipped to offer strategies to female

protégés for overcoming barriers in career development. While psychosocial development may propose greater success with same-sex mentorships, a number of studies conclude that male and female protégé receive greater compensation and promotional results when paired with male mentors rather than female mentors. This may be due to the fact that male mentors have more power and network connections within a male-dominated business culture. Male protégés still benefitted from having male mentors notably in compensation efforts, but female protégés appear to benefit the most from having male mentors in reaching and maintaining a level of satisfaction and satisfactoriness that allows the individual to attain tenure. Male protégés with female mentors reported being less satisfied their mentor's efforts for providing challenging assignments and career development functions.

Studies conducted in 2003 and 2004 have examined the level of diversity of women in agricultural education and have found that while numbers are rising, the percentage of women to men educators remains low and the number of role models for female educators also remains low. Women agriculture educators have reported experiencing barriers such as exclusion by peers and acceptance by male clients within the agriculture industry, balancing career and family responsibilities and the lack of support by administration. Within the organization of extension education, women agriculture educators expressed these same barriers. A majority of these women held master's level degrees, felt comfortable with their job responsibilities and ability to deliver program content and felt that even though sacrifices were made in order to achieve their current level of career success, many would make the same sacrifices again and encourage other women to pursue occupations as agriculture educators. It is

important to review the success mentoring plays in preparing Extension educators, determine what barriers exist and continually evaluate the overall organizational culture that is present.

Chapter Three

Purpose and Objectives

The purpose of this study was to understand the type of barriers, if any, that hinder Extension educators in the 21st century and the support system that may be in place in overcoming those barriers. The objectives for this study included:

1. Describe extension educators' level of job satisfaction.
2. Describe the level of support perceived by extension educators.
3. Describe the perceived barriers extension educators face.
4. Describe the level of mentorship in place for extension educators.

Research Design

This research study was descriptive in design utilizing quantitative survey instrumentation. Quantitative research is defined by Creswell (2014) as “an approach for testing objective theories by examining the relationship among variables” (p. 4). The descriptive-survey approach examined what support systems are currently available to extension educators who face barriers in their careers.

Population

The population for this study consisted of 224 University of Missouri Extension specialists and educators from across Missouri (Table 1). Data from the population gave the researcher perspective into all educators' perceptions and more specifically insight into female educators' experiences. The census technique utilized in this study was purposive sampling, which falls in the non-probabilistic sampling technique category. Purposive sampling was appropriate because this study examined an entire population of a limited group based on the purpose of the study.

Table 1

Population categories

Category area	Total
Agriculture and Natural Resources	80
(Agriculture Business, Agronomy, Dairy, Horticulture, Livestock and Natural Resource Engineer)	
Business and Workforce Development	12
Community Development	20
(Civic Communications and Community Development)	
Human Environmental Sciences	62
(Family Financial Education, Housing and Environmental Design, Human Development and Family Studies and Nutrition and Health Education)	
Youth Development	50
Total Specialists/Educators	224

Instrumentation

The instrumentation utilized for this study was an internet-based survey questionnaire. The survey method was used to measure the level of perceived barriers and the effectiveness of support programs offered to Extension educators. This method was chosen because the researcher wanted to preserve the anonymity of the respondents and allow them to answer the questions in an open manner. The questionnaire for this study was adapted from a pre-existing questionnaire deemed reliable in studies conducted by Foster and Seevers (2003). The questionnaire was slightly modified by the researcher and reviewed by a panel of experts for face and content validity. Recommendations from the panel of experts were implemented. The research description, protocol and questionnaire were submitted and approved by the Research Campus Institutional Review Board (IRB #2005735) at the University of Missouri.

Data Collection

In an attempt to receive the most responses from the census population, questionnaires were sent in the early fall of 2016 using Qualtrics. The data collection process included five steps, sent in three day intervals: emailed invitation, emailed cover letter (contained the link to the questionnaire) and three emailed reminders (with the same questionnaire link). The process used for data collection follows recommended procedures (Dillman, Smyth & Christian, 2009). An early to late response comparison was conducted to address non-response error (Miller & Smith, 1983). Early respondents were deemed as those completing the questionnaire within the first 12 hours of receiving the link and late respondents completing the questionnaire in the final 12 hours of the data collection window. When comparing the data of the early to late respondents, means

were within one standard deviation of each other. Therefore, the findings are assumed to be representative of the population and may be generalized to the frame described in the research. Caution should be taken when comparing findings to other similar populations beyond the one described. All calculations were done using SPSS and findings were shared as group data with no individual data were shared with identifiers to ensure confidentiality.

Chapter Four

The purpose of this study was to understand the type of barriers, if any, that hinder Extension educators in the 21st century and the support system that may be in place in overcoming those barriers. The following objectives were created to help guide this study:

1. Describe extension educators' level of job satisfaction.
2. Describe the level of support perceived by extension educators.
3. Describe the perceived barriers extension educators face.
4. Describe the level of mentorship in place for extension educators.

Demographics

The population for this study consisted of 224 University of Missouri Extension specialists and educators from across Missouri. Sixty-five percent ($n = 146$ respondents) of the population responded to the questionnaire. Table 2 contains the programmatic area breakdown of those who responded to the study.

Table 2

Respondent program area

Program area	<i>n</i>	%
Agriculture and Natural Resources	51	34.93
Business and Workforce Development	5	3.42
Community Development	14	9.59
Human Environmental Sciences	32	21.92
Youth Development	29	19.86
No response provided	15	10.28
Total	146	100.00

The majority of the respondents, 116 (79.45%), described their race and national origin as White. The remaining respondents included: three American Indian or Alaskan Native, one Hispanic/Latino, four Black or African American and 22 preferred not to specify or chose not to answer. The respondents that completed the survey included 50 males (34.25%), 73 females (50.00%) and 23 (15.75%) either preferred not to specify their gender or chose to not answer the question. Ninety (61.64%) of the respondents were married, 25 (17.12%) were single and 31 (21.24%) either preferred not to specify their marital status or chose to not answer. Seventy-seven (52.75%) of the respondents answered they have no children under the age of 18 as their dependents, five (3.42%) have more than three, 10 (6.85%) have three, 23 (15.75%) have two, 17 (11.64%) have one and 14 (9.59%) chose to not answer this question. The majority of the respondents, 116 (79.45%), hold a master's degree as their highest level of education, four (2.74%) bachelor's degree, 13 (8.90%) doctoral degree, two (1.38%) had received a degree not listed as part of the questionnaire and 11 (7.53%) chose not to respond to this question.

The largest groups of respondents were between the ages of 51-55 and 56-60

(Table 3).

Table 3

Respondent age range

Age range	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
20-25	2	4.00	3	4.10	5	3.43
26-30	1	2.00	9	12.30	12	8.22
31-35	4	8.00	10	13.70	14	9.59
36-40	6	12.00	7	9.60	14	9.59
41-45	2	4.00	8	11.00	11	7.53
46-50	8	16.00	3	4.10	11	7.53
51-55	7	14.00	9	12.30	19	13.01
56-60	12	24.00	7	9.60	19	13.01
61-65	3	6.00	8	11.00	12	8.22
65+	4	8.00	4	5.50	8	5.48
No response	0	0.00	0	0.00	21	14.39
Total	49	98.00	68	93.20	146	100.00

The largest group of respondents reported a current salary range from \$50,000-\$54,000 (Table 4).

Table 4

Respondent salary range

Salary range	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
\$30-34,000	0	0.00	2	2.70	3	2.05
\$35-39,000	1	2.00	2	2.70	3	2.05
\$40-44,000	3	6.00	12	16.40	16	10.96
\$45-49,000	7	14.00	6	8.20	13	8.90
\$50-54,000	20	40.00	33	45.20	56	38.36
\$55-59,000	9	18.00	8	11.00	19	13.01
\$60-64,000	2	4.00	3	4.10	6	4.11
\$65-69,000	2	4.00	0	0.00	2	1.38
\$70-74,000	1	2.00	1	1.40	2	1.38
Over \$75,000	2	4.00	1	1.40	3	2.05
No response	0	0.00	0	0.00	23	15.75
Total	47	94.00	68	93.20	146	100.00

On average, most of the respondents spend between 41-50 hours per week on work related activities (Table 5).

Table 5

Work hour range

Hour range	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Less than 20	0	0.00	0	0.00	0	0.00
20-25	0	0.00	0	0.00	0	0.00
26-30	0	0.00	1	1.40	1	0.68
36-40	2	4.00	2	2.70	5	3.43
41-45	15	30.00	28	38.40	46	31.50
46-50	20	40.00	24	32.90	50	34.25
56-60	6	12.00	12	16.40	20	13.70
60+ hours	5	10.00	5	6.80	12	8.22
No response	0	0.00	0	0.00	12	8.22
Total	48	96.00	72	98.60	146	100.00

The largest percentage of respondents spent less than 20 hours per week on family related activities (Table 6).

Table 6

Family hour range

Hour range	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Less than 20	17	34.00	31	42.50	51	34.94
20-25	14	28.00	16	21.90	31	21.23
26-30	9	18.00	8	11.00	20	13.70
36-40	4	8.00	8	11.00	12	8.22
41-45	3	6.00	3	4.10	8	5.48
46-50	1	2.00	1	1.40	3	2.05
56-60	0	0.00	2	2.70	4	2.74
60+ hours	1	2.00	3	4.10	4	2.74
No response	0	0.00	0	0.00	13	8.90
Total	49	98.00	72	98.60	146	100.00

On average, the majority of the respondents were not involved in 4-H as a youth, but did have agriculturally-related work experience prior to entering the field of extension education. Seventy-five (51.37%) respondents were not involved in 4-H, 61 (41.78%) were 4-H members as a youth and 10 (6.85%) chose not to respond to this question. A large majority of the respondents that completed the survey, 101 (69.18%) had prior agriculture-related work experience, 35 (23.97%) did not have an agriculture background and 10 (6.85%) chose not to respond to this question. Areas of agriculture-related experience included farming, research, agricultural education and the plant science industry.

Objective One – Job Satisfaction

Respondents were asked to report their job satisfaction on a five-point scale, ranging from one (*Very Satisfied*) to five (*Very Dissatisfied*). Respondents were *Somewhat Satisfied* (Table 7) with their current Extension position based on the calculated mean of 2.08 ($SD = 1.02$). Individual answers ranged from one to five (Table 8).

Table 7

Job satisfaction

Satisfaction	<i>n</i>	<i>M</i>	<i>SD</i>
Male	50	1.94	1.04
Female	73	2.10	0.99
All respondents	146	2.08	1.02

Note. Scale based upon 1-1.49 = Very Satisfied, 1.50-2.49 = Somewhat Satisfied, 2.50-3.49 = Neutral, 3.50-4.49 = Somewhat Dissatisfied, 4.5-5.0 = Very Dissatisfied

Table 8

Level of satisfaction

Satisfaction	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Very satisfied	19	38.00	19	26.03	44	30.14
Somewhat satisfied	23	46.00	39	53.42	69	47.26
Neutral	1	2.00	6	8.22	13	8.91
Somewhat dissatisfied	6	12.00	7	9.59	17	11.64
Very dissatisfied	1	2.00	2	2.74	3	2.05
No response	0	0.00	0	0.00	0	0.00
Total	50	100.00	73	100.00	146	100.00

Respondents were asked to report the level of morale they encounter from colleagues on a five-point scale ranging from one (*Very Positive*) to five (*Very Negative*). Based on the calculated mean ($M = 2.79$; $SD = 1.09$) the respondents were *Neutral* in the level of morale they encounter from colleagues in their current Extension position (Table 9). Individual answers ranged from one to five (Table 10).

Table 9

Morale

Morale	<i>n</i>	<i>M</i>	<i>SD</i>
Male	50	2.84	1.10
Female	73	2.77	1.12
All respondents	145	2.79	1.09

Note. Scale based upon 1-1.49 = Very Positive, 1.50-2.49 = Somewhat Positive, 2.50-3.49 = Neutral, 3.50-4.49 = Somewhat Negative, 4.5-5.0 = Very Negative

Table 10

Level of morale

Morale	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Very positive	4	8.00	7	9.55	11	7.53
Somewhat positive	20	40.00	32	43.91	64	43.84
Neutral	8	16.00	8	10.94	20	13.70
Somewhat negative	16	32.00	23	31.50	44	30.14
Very negative	2	4.00	3	4.10	6	4.11
No response	0	0.00	0	0.00	1	0.68
Total	50	100.00	73	100.00	146	100.00

Objective Two – Level of Support

Respondents were asked to report the level of support they receive from individuals they engage with both within Extension and outside of Extension (Table 11). Support was measured on a five-point scale ranging from one (*Very Supportive*) to five (*Not at All*). Respondents reported they were *Very Supported* ($M = 1.43$; $SD = 0.75$) by *Personal and/or family* members with individual answers ranging from one to four. At the *County Extension level* ($M = 1.61$; $SD = 0.84$), *Local producers and clientele* ($M = 1.77$; $SD = 0.87$) and *Regional Extension level* ($M = 2.01$; $SD = 1.17$) the respondents reported being *Somewhat Supported* with the individual answers for all three categories ranging from one to five. The final category, *State Extension level*, was

viewed as *Neutral* ($M = 2.70$; $SD = 1.17$) in support based on the data with individual answers ranging from one to five.

Table 11

Level of support

Support	Male			Female			All respondents		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
State Extension level	50	2.74	1.08	73	2.63	1.29	146	2.70	1.17
Regional Extension level	49	1.90	1.12	73	2.03	1.29	144	2.01	1.17
County Extension level	50	1.50	0.74	73	1.59	0.86	145	1.61	0.84
Local producers and clientele	50	1.72	0.86	73	1.82	0.87	145	1.77	0.87
Personal and/or family	50	1.44	0.73	73	1.41	0.74	144	1.43	0.75

Note. Scale based upon 1-1.49 = Very Supported, 1.50-2.49 = Somewhat Supported, 2.50-3.49 = Neutral, 3.50-4.49 = Somewhat Not Supported, 4.5-5.0 = Not at All Supported

Objective Three – Barriers

Respondents were asked to report how significant a challenge identified barriers were in their current Extension role (Table 12). The level of challenge was measured on a five-point scale ranging from one (*Very Significant*) to five (*Not at All*). Respondents reported *Salary and promotion* ($M = 1.90$; $SD = 0.93$) and *Balancing work and family* ($M = 1.92$; $SD = 1.04$) as *Somewhat Significant* challenges they face with individual answers ranging from one to five. *State specialists not asking for your assistance* ($M = 2.74$; $SD = 1.19$), *Acceptance from producers and clients* ($M = 2.86$; $SD = 1.24$) and *Lack of trust from state specialists* ($M = 3.17$; $SD = 1.34$) were viewed as *Neutral* challenges with individual answers ranging from one to five. Respondents reported *Being treated differently than previous specialist/educator* ($M = 3.61$; $SD = 1.35$), *Neighboring specialist/educator working outside their territory* ($M = 3.82$; $SD = 1.16$) and *Other specialist/educator being impatient with you* ($M = 3.90$; $SD = 1.08$) were reported to be *Somewhat Not Significant* by respondents with individual answers ranging from one to five.

Table 12

Level of challenge

Challenge	Male			Female			All respondents		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Balancing work and family	50	2.06	1.08	73	1.79	0.99	143	1.92	1.04
Acceptance from producers and clients	50	2.92	1.21	73	2.86	1.28	143	2.86	1.24
Salary and promotion	50	2.08	0.99	73	1.84	0.91	143	1.90	0.93
State Specialists not asking for your assistance	50	2.80	1.26	73	2.75	1.18	143	2.74	1.19
Neighboring Specialist/Educator working outside their territory	50	3.80	1.05	72	3.93	1.21	142	3.82	1.16
Other Specialist/Educator being impatient with you	50	3.90	0.84	73	4.08	1.13	143	3.90	1.08
Lack of trust from State Specialists	50	3.22	1.30	73	3.19	1.44	143	3.17	1.34
Being treated differently than previous Specialist/Educator	50	3.90	1.11	73	3.53	1.48	143	3.61	1.35

Note. Scale based upon 1-1.49 = Very Significant, 1.50-2.49 = Somewhat Significant, 2.50-3.49 = Neutral, 3.50-4.49 = Somewhat Not Significant, 4.5-5.0 = Not at All Significant

Respondents reported how significant a challenge working with specific groups of educators can be based on producer and client engagement (Table 13). Perceived significant challenges were measured on a five-point scale ranging from one (*Very Significant*) to five (*Not at All*). There were not any *Very Significant* or *Somewhat Significant* challenges perceived by respondents when asked about the level of support from producers and clients. *Producers and clients not engaging with new specialist/educator* ($M = 3.19$; $SD = 1.27$), *Producers and clients not engaging with young specialist/educator* ($M = 3.30$; $SD = 1.19$), *Producers and clients questioning practical background of new specialist/educator* ($M = 3.13$; $SD = 1.27$) and *Producers and clients questioning practical background of young specialist/educator* ($M = 3.15$; $SD = 1.22$) were reported as *Neutral* challenges with individual answers ranging from one to five. Respondents reported *Producers and clients not engaging with female specialist/educator* ($M = 3.71$; $SD = 1.16$) and *Producers and clients not engaging with male specialist/educator* ($M = 3.99$; $SD = 1.09$) as *Somewhat Not Significant* challenges they face with individual answers ranging from one to five.

In addition to the challenges listed in the instrument, respondents added funding, lack of training/resources, balancing work and family reporting, and not having enough time. Respondents shared, there may be some conflict between colleagues/staff at various levels within Extension, including campus, as well as issues with equality. Gossip, lack of confidentiality, lack of concern and coworkers (state and regional) that spread rumors were listed as concerns. Even producers or clients questioning values based on sexuality was described.

Table 13

Significant challenges

Challenges	Male			Female			All respondents		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Producers and clients not engaging with female specialist/educator	50	3.78	1.08	72	3.74	1.19	141	3.71	1.16
Producers and clients not engaging with male specialist/educator	50	3.92	1.09	72	4.11	1.04	141	3.99	1.09
Producers and clients not engaging with new specialist/educator	50	3.20	1.25	73	3.21	1.29	142	3.19	1.27
Producers and clients not engaging with young specialist/educator	50	3.28	1.18	73	3.33	1.21	142	3.30	1.19
Producers and clients questioning practical background of new specialist/educator	50	3.06	1.32	72	3.19	1.27	140	3.13	1.27
Producers and clients questioning practical background of young specialist/educator	50	3.08	1.24	73	3.22	1.24	142	3.15	1.22

Note. Scale based upon 1-1.49 = Very Significant, 1.50-2.49 = Somewhat Significant, 2.50-3.49 = Neutral, 3.50-4.49 = Somewhat Not Significant, 4.5-5.0 = Not at All Significant

Objective Four – Mentorship

The majority of the respondents (67.81%) contact other Extension specialists/educators more than once a week (Table 14).

Table 14

Contacting colleagues

Contact	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
More than once a week	38	76.00	46	61.33	99	67.81
Once a week	12	24.00	24	32.00	37	25.35
Once a month	0	0.00	5	6.67	6	4.11
Once a quarter	0	0.00	0	0.00	2	1.37
Once a year	0	0.00	0	0.00	1	0.68
Do not contact other agents	0	0.00	0	0.00	1	0.68
Total	50	100.00	75	100.00	146	100.00

The majority of the respondents (60.27%) prefer to contact other Extension Specialists/Educators by email (Table 15). The percentage of preferred contact by email is almost twice that of telephone usage (30.15%) and seven-times that of in person contact (7.53%).

Table 15

Preferred means of contacting colleagues

Contact	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Telephone	16	32.00	19	26.00	44	30.15
Email	27	54.00	52	71.20	88	60.27
In person	7	14.00	2	2.70	11	7.53
No response	0	0.00	0	0.00	3	2.05
Total	50	100.00	73	100.00	146	100.00

Respondents were asked to report on the structured mentoring/training they have received from Extension to assist them in performing the duties of their job (Table 16). Structured mentoring was measured on a five-point scale ranging from one (*Very Satisfied*) to five (*Very Dissatisfied*). Based on the calculated mean ($M = 2.66$; $SD = 1.19$) the respondents were *Neutral* in the level of satisfaction with respect to the structured mentoring/training they have received from Extension to assist them in performing the duties of their job. Individual answers ranged from one to five.

Table 16

Structured mentoring

Mentoring	<i>n</i>	<i>M</i>	<i>SD</i>
Male	50	2.80	1.21
Female	73	2.49	1.20
All respondents	140	2.66	1.19

Note. Scale based upon 1-1.49 = Very Satisfied, 1.50-2.49 = Somewhat Satisfied, 2.50-3.49 = Neutral, 3.50-4.49 = Somewhat Dissatisfied, 4.5-5.0 = Very Dissatisfied

Respondents shared that some of the mentoring received came from assigned coworker/mentors, In Service Educational (ISE) meetings and/or cohort sessions. Other respondents described having been with Extension for many years and felt the training/mentoring they received was much different than what new hires currently receive. When asked for additional comments, some respondents stated they felt there is a lack of mentoring/training provided by the Extension organization.

Respondents were asked to report on the mentoring/training they sought on their own to assist them in performing the duties of their job (Table 17). Self-sought

mentoring was measured on a five-point scale ranging from one (*Very Satisfied*) to five (*Very Dissatisfied*). Based on the calculated mean ($M = 1.88$; $SD = 0.80$) the respondents were *Somewhat Satisfied* in the level of satisfaction with respect to mentoring/training they have sought on their own to assist them in performing the duties of their job. Individual answers ranged from one to four. Described mentoring opportunities sought by specialists/educators came from ISE's, coworkers/mentors, self-study/trainings as well as mentors/meetings outside of Extension.

Table 17

Self-sought mentoring

Mentoring	<i>n</i>	<i>M</i>	<i>SD</i>
Male	50	1.90	0.79
Female	73	1.75	0.76
All respondents	140	1.88	0.80

Note. Scale based upon 1-1.49 = Very Satisfied, 1.50-2.49 = Somewhat Satisfied, 2.50-3.49 = Neutral, 3.50-4.49 = Somewhat Dissatisfied, 4.5-5.0 = Very Dissatisfied

The majority of the respondents (89.04%) reported they have encouraged/supported a female Extension specialist/educator when she faced a work related challenge (Table 18). Respondents shared they have shown encouragement/support for female Extension colleagues by listening, encouraging and providing suggestions, giving program support, collaborating with coworkers and providing orientation support. When asked for additional comments, respondents did voice that sometimes farmers or clients do not give them (females) the credit they would a man and to not feel disgruntled if a person asks a male or more experienced counterpart.

Table 18

Encouragement/support for a female colleague

	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Yes	48	96.00	66	90.40	130	89.04
No	2	4.00	7	9.60	10	6.85
No response	0	0.00	0	0.00	6	4.11
Total	50	100.00	73	100.00	146	100.00

The majority of the respondents (82.19%) feel they have encouraged/supporting a male Extension specialist/educator when he faced a work related challenge (Table 19). Respondents have shown encouragement/support by listening, encouraging and providing suggestions, giving program support, collaborating with coworkers and providing orientation support. Respondents were asked to share any additional comments and a few concerns were mentioned including concern for colleagues who have faced criticism in the office believed to have stemmed from unconscious racial bias instead of legitimate concerns.

Table 19

Encouragement/support for a male colleague

Male support	Male		Female		All respondents	
	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>
Yes	46	92.00	61	83.60	120	82.19
No	4	8.00	12	16.40	18	12.34
No response	0	0.00	0	0.00	8	5.48
Total	50	100.00	73	100.00	146	100.00

The majority of the respondents (85.62%) reported they have received encouragement/support from a female Extension specialist/educator when they faced a work related challenge (Table 20). Encouragement/support was shown in forms of listening and providing suggestions as well as program and orientation support. Other respondents received support by collaborating with coworkers.

Table 20

Received encouragement/support from a female colleague

	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Yes	43	86.00	69	94.50	125	85.62
No	5	10.00	3	4.10	10	6.85
No response	0	0.00	0	0.00	11	7.53
Total	48	96.00	72	98.60	146	100.00

The majority of the respondents (82.19%) reported they have received encouragement/support from a male Extension specialist/educator when they faced a work related challenge (Table 21). Encouragement/support was shown in forms of listening and providing suggestions as well as program and orientation support. One respondent shared that a state specialist from a different program and three peer colleagues have really helped to develop curriculum to address a new audience. Other respondents received support by collaborating with coworkers. However, some respondents felt they have not received encouragement including an individual who shared there were a lot of times when the individual was being treated with absolute disrespect, and male coworkers stood by and watched it happen while saying nothing.

Table 21

Received encouragement/support from a male colleague

	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Yes	47	94.00	60	82.20	120	82.19
No	2	4.00	13	17.80	17	11.65
No response	0	0.00	0	0.00	9	6.16
Total	49	98.00	73	100.00	146	100.00

The majority of the respondents (58.22%) reported they have not been discouraged by a female Extension specialist/educator when they faced a work related challenge (Table 22). However, some respondents felt selected colleagues chose to act superior over them and demonstrated negative behavior towards them.

Table 22

Have been discouraged by a female colleague

Female discouragement	Male		Female		All respondents	
	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>
Yes	16	32.00	30	41.10	53	36.30
No	34	68.00	43	58.90	85	58.22
No response	0	0.00	0	0.00	8	5.48
Total	50	100.00	73	100.00	146	100.00

The majority of the respondents (60.96%) reported they have not been discouraged by a male Extension specialist/educator when they faced a work related challenge (Table 23). However, when respondents were asked to describe examples of discouragement, examples included a male supervisor chastising a female educator for missing a work event where the individual did not have any responsibilities and male colleagues not supporting female educators in front of producers and clients. Some respondents felt selected colleagues chose to act superior over them and demonstrated negative behavior towards them.

Table 23

Have been discouraged by a male colleague

Male discouragement	Male		Female		All respondents	
	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>
Yes	15	30.00	25	34.20	47	32.19
No	34	68.00	47	64.40	89	60.96
No response	0	0.00	0	0.00	10	6.85
Total	49	98.00	72	98.60	146	100.00

The majority of the respondents (89.04%) reported they have not discouraged a female Extension specialist/educator when the educator faced a work related challenge (Table 24). Respondents shared they did not believe they purposefully discouraged a colleague, but were simply being honest with them. Other respondents chose to stay positive and not become discouraging.

Table 24

Discouraged a female colleague

Female discouragement	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Yes	1	2.00	6	8.20	7	4.79
No	49	98.00	67	91.80	130	89.04
No response	0	0.00	0	0.00	9	6.17
Total	50	100.00	73	100.00	146	100.00

The majority of the respondents (89.04%) reported they have not discouraged a male Extension specialist/educator when the educator faced a work related challenge (Table 25). Similar to discouraging females, respondents did not feel they purposefully discouraged a colleague, but were simply being honest with them.

Table 25

Discouraged a male colleague

Male discouragement	Male		Female		All respondents	
	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>
Yes	2	4.00	4	5.50	7	4.79
No	48	96.00	69	94.50	130	89.04
No response	0	0.00	0	0.00	9	6.17
Total	50	100.00	73	100.00	146	100.00

The respondents have approximately an equal number of male or female professional mentors (Table 26). However, a majority of males (72.00%) have male mentors and a majority of females (68.50%) have female mentors.

Table 26

Professional mentor

Mentor	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Male	36	72.00	18	24.70	62	42.47
Female	11	22.00	50	68.50	66	45.21
No response	0	0.00	0	0.00	18	12.32
Total	47	94.00	68	93.20	146	100.00

The highest percentage of all respondents (47.95%) were reported to have female professional protégés (Table 27). Again, male respondents had more male protégés and female respondents had more female protégés, but male respondents had more female protégés than female respondents having male protégés.

Table 27

Professional protégés

Protégés	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Male	30	60.00	13	17.80	48	32.88
Female	14	28.00	50	68.50	70	47.95
No response	0	0.00	0	0.00	28	19.17
Total	44	88.00	63	86.30	146	100.00

The highest percentage of mentoring (35.62%) provided to coworkers, by both male and female respondents, generally occurred once a month (Table 28). Some respondents provide general mentoring to assigned mentees, while other respondents gave general mentoring by helping any colleague with questions. Respondents provided regular mentoring to new hires as well as networking at meetings and conferences.

Table 28

Provide regular mentoring

Regular mentoring	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Once a week	9	18.00	13	17.80	24	16.44
Once a month	19	38.00	26	35.60	52	35.62
Once a quarter	12	24.00	19	26.00	32	21.92
Once a year	5	10.00	6	8.20	11	7.53
Do not communicate with other agents	4	8.00	7	9.60	13	8.90
No response	0	0.00	0	0.00	14	9.59
Total	49	98.00	71	97.30	146	100.00

The highest percentage of respondents (33.57%) receive regular mentoring once a month from others in Extension (Table 29). Respondents felt they received both formal and informal mentoring. Some respondents received mentoring via coworker collaborations, visiting with other specialists/educators and simply sharing ideas with fellow colleagues.

Table 29

Receive regular mentoring

	Male		Female		All respondents	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Regular mentoring						
Once a week	5	10.00	7	9.60	13	8.90
Once a month	23	46.00	21	28.80	49	33.57
Once a quarter	5	10.00	23	31.50	29	19.86
Once a year	10	20.00	11	15.10	23	15.75
Do not communicate with other agents	6	12.00	5	6.80	14	9.59
No response	0	0.00	0	0.00	18	12.33
Total	49	98.00	67	91.80	146	100.00

Chapter Five

Summary

The purpose of this study was to understand the type of barriers, if any, that hinder Extension educators in the 21st century and the support system that may be in place in overcoming those barriers. The study began as an agricultural-based study, focusing on female specialists and educators. However, as the study evolved, it became evident that a more global look at all educators would be most beneficial. In addition, the findings were presented in a grouped manner to insure confidentiality of the respondents. The population for this study consisted of 224 University of Missouri Extension specialists and educators from across Missouri. Data from the respondents gave the researcher perspective into all educators' perceptions.

Major Findings

Based on the results of this study the following major findings were revealed.

1. Respondents were somewhat satisfied with their current Extension position. However, they were neutral in the level of morale they encounter from colleagues in their current Extension position.
2. Both male and female respondents reported a greater level of support from family, local producers/clientele and the county Extension level than from the regional and state Extension level.
3. Both male and female respondents identified salary and promotion as well as balancing work and family as somewhat significant challenges in their current Extension role.

4. Respondents reported the challenges with producers and clients not engaging with male/female, new/young or questioning educators' practical background as neutral to somewhat not significant.
5. Majority of the respondents contact colleagues more than once a week via email.
6. Respondents felt self-sought mentoring was more effective at assisting them in performing the duties of their job over formal mentoring that is provided to them.
7. Majority of the respondents reported they had encouraged both male and female colleagues as well as received encouragement and support when they faced a work related challenge. Educators are more likely to encourage/support a female colleague over a male colleague, while support received from male and female colleagues is closer in comparison.
8. Majority of the respondents reported they had not been discouraged by either male or female colleagues as well as they have not discouraged a male or female when the colleague faced a work related challenge.
9. Majority of the males have male mentors and protégés as well as the majority of the females have female mentors and protégés.
10. The highest percentage of mentoring provided to coworkers as well as receiving regular mentoring occurs once a month from colleagues in Extension.

Discussion, Implications and Recommendations

The discussion, implications and recommendations that follow are grouped by the learning objectives that guided the study. Discussion is provided around the findings for each objective with the associated implications and recommendations.

Objective One – Job satisfaction

In this study, respondents reported being *Somewhat Satisfied* ($M = 2.08$) with their current Extension position and programming efforts, whether they were new employees or faculty with many years of experience. However, morale ($M = 2.79$) was reported as *Neutral* among Extension field faculty and staff. The feeling of a potential lower morale within the organization may be considered a barrier to a more successful work environment. The results of this study are similar to those from the Seevers and Foster's research done in 2004 where, in spite of the barriers and sacrifices made, almost 85% of the participants reported being very satisfied to satisfied with their careers as Extension educators.

Job satisfaction and morale provide insight into the organizational culture within Extension. Extension educators experience both professional and personal growth through the artifacts, espoused values and basic assumptions levels that form organizational culture as described by Schein (1992). Newly hired specialist/educators are formally trained through a series of Cohort sessions, designed to introduce the employee to the University of Missouri Extension system. A new employee may gain some knowledge into the organization's culture through Cohort/orientation programs, but much of this beginning knowledge will be from the artifacts level and will be interpreted through the individual's own personal experience. Every visual artifact and interaction begins to influence the satisfaction and morale of the work environment.

Espoused values are often the foundation of an organization's culture and are used to create a company-wide code of conduct that is usually closely aligned with the organization's mission statement. Extension employees are encouraged to promote

Extension's mission statement through curriculum development and program presentations. Faculty and staff often receive encouragement in promoting these values at campus seminars and annual meetings. As the values become accepted, they become the underlying drive (or lack of drive) for positive job satisfaction and morale.

When solutions to problems work consistently, they tend to be accepted as the "normal" way for business to be conducted and are considered basic assumptions. New employees generally learn these assumptions from more experienced employees within the organization. Extension's mentoring program attempts to pair new employees with mentors who have many years of experience (within the same program area), mentors who have a solid grasp of the basic assumptions that make up the organization's structure and the willingness to provide guidance to new educators. These interactions influence the overall satisfaction and morale of both the mentors and the protégés leading to the organizational culture. If morale were to decrease beyond what is seen in the findings it may be necessary to attempt to strengthen morale within the organization. However, if job satisfaction continues to stay high, substantial changes are probably not warranted at this time, but a pulse should be kept on these influencers of organizational culture.

Objective Two – Level of support

Harden (2015) reported that the agricultural industry has few support groups and mentorship programs women need in order to be successful. Support is key for all educators, male and female, in order to fully execute their jobs at a high level. Both male and female respondents reported a greater level of support from family, local producers/clientele and the county Extension level than from regional and state Extension. Respondents shared that they supported colleagues in various ways including

listening, offering suggestions and sharing information to make program efforts more effective. Both male and female specialists/educators reported similarly that they offered encouragement to other faculty and staff regardless of gender or ethnicity.

Whether it is a geographical or organizational hierarchy factor, the mean difference between the *County* and *Regional/State Extension* implies that there is less perceived support from *Regional/State Extension* faculty and administration. Challenges reported by respondents concerning regional and state administration include preferential treatment towards certain field staff, lack of communication and inclusion from state faculty, gossip or a lack of confidentiality and a lack of follow through from program and/or regional directors. This potential sense of disconnect between field and administrative faculty and staff supports the perceived *Neutral* morale reported by respondents. The potential disconnect between levels is often seen within an organization but when it becomes great, the effectiveness and efficiency of an organization may falter. Administrators at all levels should be cognizant of perceived support and attempt to communicate within and between the levels as much as possible to alleviate any sense of non-support in an effort to build a culture of support.

Objective Three – Barriers

Barriers faced by both men and women educators disrupts the flow and relationships in an organization's culture. Many of the barriers perceived by female educators in the Foster and Seevers (2003, 2004) studies appear to be faced by all Extension educators even today. Salary and promotion and balancing a career and family are some of the more substantial challenges identified by Extension educators. Furthermore, several of the comments reported by the respondents in this study are

similar to those made in the Foster and Seevers (2003, 2004) studies. The lack of commitment from directors and administrators, struggling with clients who are not willing to work with female educators, stereotyping by male colleagues, potentially being left out from receiving pertinent information, meeting the expectations of directors and co-workers in order to gain acceptance and not having the years of experience as other established employees were reported. Other areas that were similar include, lack of female role models, acceptance by male colleagues and clients, the “need to prove yourself” and even the personal attitude of “not being good enough”.

Additional barriers reported by respondents included county budget issues, pressure from campus administration for revenue generation and a lack of availability of state curriculum. When asked for any additional comments, respondents shared there may be some conflict between colleagues/staff at various levels within Extension, including campus, as well as issues with equality. Gossip, lack of confidentiality, lack of concern and coworkers (state and regional) that spread rumors, were also listed as challenges for a productive work environment. Respondents reported that, in some instances, producers or clients questioned the educator’s qualifications because of age and sexuality. All of the previous comments influence the organizational culture and should be viewed as potential barriers that individuals have encountered. Even though much of the quantitative data reported limited concern there are some individuals that shared concerns.

Objective Four – Mentorship

Formal mentoring programs are governed by the organization, pairing a mentor to a protégé and are usually set for a requisite period of time. Mentors may be selected by a

program director, based on their skills, and have a specific set of goals to achieve with the new trainee. Informal mentoring relationships occur without guidelines and develop more on mutual interests and the career needs of both the mentor and protégé. Without the issue of a timeline, informal mentoring slowly builds career development and psychosocial functions such as self-efficacy and personal development. Similar to results from past studies (Inzer & Crawford; Ragins & Cotton, 1999), respondents reported that self-sought mentoring was more effective at assisting them in their job performance than formal mentoring. Respondents reported being *Very Satisfied* to *Somewhat Satisfied* with mentoring they sought on their own as compared to the *Somewhat Satisfied* to *Neutral* response reported for formal mentoring assigned by Extension administration. Many respondents reported attending Cohort training and being assigned state and regional mentors, with varying degrees of success from both assigned personnel. Some respondents reported that there is a need for mentor training and that some mentors were not prepared to provide guidance, while other respondents reported successful relationships with their assigned mentors. Respondents contacted fellow regional specialists for support and training and used ISE's as a method of structured and self-sought mentoring. Study data concluded that regular mentoring, both received and provided, occurred on a monthly basis.

In the Seevers and Foster (2003) study, the number of women in agricultural and extension education serving as mentors to other female employees, or that had female mentors themselves, was relatively low. Pairing same gender mentors and protégés may aid both the new employee and employer by providing an environment that is more appropriate to the learning patterns of the employee. In this study, the majority of the

male respondents have/had male mentors and protégés, while similarly, the majority of the female respondents have/had female mentors and protégés. Comments from respondents did not indicate that mentors or protégés preferred to work with one gender or another. It has been found in previous studies that protégés, both male and female, of male mentors received more career advancement opportunities than those of female mentors because male mentors had more advancement connections and power in organizations than women (Tharenou, 2005). Again, comments from respondents in this research did not indicate that mentor gender played a role in career advancement opportunities.

Summary

Findings from this research merit a brief discussion. It appears that male and female educators alike face similar barriers and are consistently supporting each other. While some respondents reported satisfactory training with assigned mentors, a number of respondents reported a higher level of satisfaction from self-sought mentoring rather than assigned relationships. Comments included that some assigned mentors lacked the skills or interest for training new employees or that no training was provided at all. Formal training and mentoring programs may need to be reviewed to determine effectiveness and how to better provide new employees with the practical knowledge and skills necessary to become successful educators in the field. Mentors assigned to new employees may need training or guidance on how to be successful mentors. This brings to light the potential need to review the assigned mentoring program within Extension and evaluate the effectiveness of the current methods of support.

Secondly, there is a perceived disconnect between field and state Extension faculty. Respondents felt the least amount of support from the regional and state extension levels. Most respondents were satisfied with the level of contact from other field faculty, but less satisfied with the level of communication and the sense of preference from state specialists. Communication and trust issues between these two levels of personnel affect the organization's culture and effectiveness. Studies may need to be conducted into the professional requirements of both parties. Effective and open communication between state and field faculty helps ensure that Extension's research based information reaches the general public.

Recommendations for Future Research

Based on the findings, official programs are in place, but may not be adequately meeting the objectives or needs of the University of Missouri Extension and its field faculty and staff. Further research may be conducted to examine what parts of the formal training and mentoring programs are seen as effective and which parts are not deemed effective. In this study, several respondents reported that new employee orientation programs such as Cohort were potentially not helpful. Other respondents stated they felt there was a lack of mentoring/training provided by the Extension organization and that mentors, themselves, were not adequately trained. The more researchers can uncover; the better formal mentoring programs can be designed to enhance the educational experience of the program.

More research may be done within each of the program areas. This study began as an agricultural-based study. However, as the research evolved, University of Missouri Extension field specialists/educators were asked to participate in this study. Conducting

research within each program area would allow for more specific findings in relations to specific groups. With the conclusions, program directors could potentially use data collected to make changes and improvements within their program areas. Quantitative and qualitative data may provide program directors with information to modify mentoring/training programs, meeting the needs of Extension faculty and staff in the 21st century.

The data collected in this study brought to the researcher's attention that there may be a disconnect between field staff and state specialists. Research may be done to see what specific needs are required by field staff from state specialists. Likewise, data may be collected addressing the needs of state specialists from field staff. Field staff collect evaluations from program participants and, in turn, are expected to report results through the myExtension reporting system. Program directors use this information to evaluate the overall usefulness of the program and decide if modifications to curriculum are needed. By looking at the needs of both groups, the potential to bridge the gap between the two levels of educators could be addressed.

Seaman Knapp's concept of demonstration farm work and the initial purpose of extension agents began the age of self-improvement for rural America. The success of any organization and its culture requires periodic assessment. By researching the current support and barriers experienced by Extension field staff, University of Missouri Extension can address issues that need improvement, providing its educators with the necessary tools to meet the educational needs of the public.

Appendices
Appendix A: Recruitment Letter

Extension Support and Challenges Recruitment Letter

Dear Extension Educator,

My name is Brenda Arnold and I am the University of Missouri Extension Livestock Educator based in Lewis County. I am also an Agricultural Education graduate student. My thesis research is focused on determining challenges agricultural Extension educators face in their careers and how support and mentoring play a role in development. Please take a few minutes to complete the survey by clicking on the link below by **Monday, October 3, 2016**. The survey should take less than 10 minutes to complete. Your name will not be connected to your responses so all of your answers will be confidential. Upon completing the survey you will have the opportunity to enter in a drawing for one of four \$25 gift cards that will be given.

Your participation in this study is voluntary and you may choose to withdraw at any time without penalty or consequence. There are no known risks resulting from your participation and no direct benefit from your participation is expected. There is no cost to you. Please use the following link to complete the questionnaire:

Survey Link: `{1://SurveyLink?d=Take the survey}`

If you have questions, please do not hesitate to contact me at arnoldbr@missouri.edu or 573-767-5273. If you have questions about your rights as a research participant, you may also contact the staff in the Office of Research Campus Institutional Review Board at the University of Missouri at 573-882-9585. The title of this study is *Perceived Support and Challenges Faced by Extension Specialists and Educators* (IRB #2005735).

Sincerely,

Brenda Arnold
B.S. Animal Science
Candidate for Masters in Science
Department of Agricultural Education and Leadership
University of Missouri

Jon Simonsen
Associate Professor and Chair
Department of Agricultural Education and Leadership
University of Missouri
simonsenj@missouri.edu

Appendix B: Instrument



University of Missouri

Educator Barriers Support and Challenges in Extension

Dear Extension Educator,

My name is Brenda Arnold and I am the University of Missouri Extension Livestock Educator based in Lewis County. I am also an Agricultural Education graduate student. My thesis research is focused on determining challenges agricultural Extension educators face in their careers and how support and mentoring play a role in development. Please take a few minutes to complete the following survey by **Monday, October 3**. The survey should take less than 10 minutes to complete. Your name will not be connected to your responses so all of your answers will be confidential. Upon completing the survey you will have the opportunity to enter in a drawing for one of four \$25 gift cards that will be given.

Your participation in this study is voluntary and you may choose to withdraw at any time without penalty or consequence. There are no known risks resulting from your participation and no direct benefit from your participation is expected. There is no cost to you. Your completion of the questionnaire is your consent to participate.

If you have questions, please do not hesitate to contact me at arnoldbr@missouri.edu or 573-767-5273. If you have questions about your rights as a research participant, you may also contact the staff in the Office of Research Campus Institutional Review Board at the University of Missouri at 573-882-9585. The title of this study is *Perceived Support and Challenges Faced by Extension Specialists and Educators*(IRB#2005735).

Sincerely,

Brenda Arnold
B.S. Animal Science
Candidate for Masters in Science
Department of Agricultural Education and Leadership
University of Missouri

Q8 Rate your level of job satisfaction with your current Extension position:

- Very Satisfied
- Somewhat Satisfied
- Neutral
- Somewhat Dissatisfied
- Very Dissatisfied

Q41 Rate the level of morale you encounter from colleagues in your current Extension position:

- Very Positive
- Somewhat Positive
- Neutral
- Somewhat Negative
- Very Negative

Q6 Rate your level of support you feel from the:

	Very Supported (1)	Somewhat Supported (2)	Neutral (3)	Somewhat Not Supported (4)	Not at All (5)
State Extension Level (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Regional Extension Level (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
County Extension Level (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Producers and Clientele (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Personal and/or Family (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q25 In your Extension role, how significant a challenge is:

	Very Significant (1)	Somewhat Significant (2)	Neutral (3)	Somewhat Not Significant (4)	Not at All (5)
Balancing Work and Family (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acceptance from Producers and Clients (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Salary and Promotion (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
State Specialists not asking for your Assistance (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neighboring Specialist/Educator Working Outside their Territory (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Specialist/Educator being Impatient with You (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lack of Trust from State Specialists (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being Treated Differently than Previous Specialist/Educator (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q49 In an Extension role, how significant a challenge is:

	Very Significant (1)	Somewhat Significant (2)	Neutral (3)	Somewhat Not Significant (4)	Not at All (5)
Producers and Clients Not Engaging with Female Specialist/Educator (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Producers and Clients Not Engaging with Male Specialist/Educator (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Producers and Clients Not Engaging with New Specialist/Educator (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Producers and Clients Not Engaging with Young Specialist/Educator (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Producers and Clients Questioning Practical Background of New Specialist/Educator (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Producers and Clients Questioning Practical Background of Young Specialist/Educator (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q26 List any other challenges you may have been exposed to:

	Very Significant (1)	Somewhat Significant (2)	Neutral (3)	Somewhat Not Significant (4)	Not at All (5)
1 (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6 How often do you contact other Extension Specialists/Educators?

- More than once a week (1)
- Once a week (2)
- Once a month (3)
- Once a quarter (4)
- Once a year (5)
- Do not contact other agents (6)

Q7 When contacting other Extension Specialists/Educators, my preferred means is:

- Telephone (1)
- Email (2)
- Letters (3)
- In Person (4)

Q39 Rate your level of satisfaction with respect to the structured mentoring/training you have received from Extension to assist you in performing the duties of your job:

- Very Satisfied (1)
- Somewhat Satisfied (2)
- Neutral (3)
- Somewhat Dissatisfied (4)
- Very Dissatisfied (5)

Q43 Explain the mentoring/training you have received from Extension:

Q40 Rate your level of satisfaction with respect to mentoring/training you have sought on your own to assist you in performing the duties of your job:

- Very Satisfied (1)
- Somewhat Satisfied (2)
- Neutral (3)
- Somewhat Dissatisfied (4)
- Very Dissatisfied (5)

Q44 Explain the mentoring/training you have sought on your own:

Q8 Have you ever encouraged/supported a:

	Yes (1)	No (2)
Female Extension Specialist/Educator when she faced a work related challenge? (1)	<input type="radio"/>	<input type="radio"/>

Q9 If yes, please briefly explain how you have encouraged/supported a female involved in Extension education work:

Q45 Have you ever encouraged/supported a:

	Yes (1)	No (2)
Male Extension Specialist/Educator when he faced a work related challenge? (1)	<input type="radio"/>	<input type="radio"/>

Q10 If yes, please briefly explain how you have encouraged/supported a male involved in Extension education work:

Q10 Have you ever received encouragement from a:

	Yes (1)	No (2)
Female Extension Specialist/Educator when you faced a work related challenge? (1)	<input type="radio"/>	<input type="radio"/>

Q11 If yes, please briefly explain how you have received encouragement from a female involved in Extension Specialist/Educator work?

Q46 Have you ever received encouragement from a:

	Yes (1)	No (2)
Male Extension Specialist/Educator when you faced a work related challenge? (1)	<input type="radio"/>	<input type="radio"/>

Q12 If yes, please briefly explain how you have received encouragement from a male involved in Extension Specialist/Educator work?

Q16 Have you ever been discouraged by a:

	Yes (1)	No (2)
Female involved in Extension Specialist/Educator work when you faced a work related challenge? (1)	<input type="radio"/>	<input type="radio"/>

Q17 If yes, please briefly explain how you have been discouraged by a female involved in Extension Specialist/Educator work?

Q47 Have you ever been discouraged by a:

	Yes (1)	No (2)
Male involved in Extension Specialist/Educator work when you faced a work related challenge? (1)	<input type="radio"/>	<input type="radio"/>

Q18 If yes, please briefly explain how you have been discouraged by a male involved in Extension Specialist/Educator work?

Q13 Have you ever discouraged a:

	Yes (1)	No (2)
Female from becoming involved in Extension Specialist/Educator work? (1)	<input type="radio"/>	<input type="radio"/>

Q14 If yes, please briefly explain how you have discouraged a female from becoming involved in Extension Specialist/Educators work?

Q48 Have you ever discouraged a:

	Yes (1)	No (2)
Male from becoming involved in Extension Specialist/Educator work? (1)	<input type="radio"/>	<input type="radio"/>

Q15 If yes, please briefly explain how you have discouraged a male from becoming involved in Extension Specialist/Educators work?

Q19 Have your professional mentors been mostly:

- Male (1)
- Female (2)

Q24 Have your professional protégés been mostly:

- Male (1)
- Female (2)

Q22 How often do you provide regular mentoring to others in Extension Specialist/Educator work?

- Once a week (1)
- Once a month (2)
- Once a quarter (3)
- Once a year (4)
- Do not communicate with other agents (5)

Q40 If you provide regular mentoring, please explain:

Q50 How often do you receive regular mentoring from others in Extension Specialist/Educator work?

- Once a week (1)
- Once a month (2)
- Once a quarter (3)
- Once a year (4)
- Do not communicate with other agents (5)

Q51 If you receive regular mentoring, please explain:

Q38 Check the program area you specialize in:

- 4-H Youth Development Specialist/Educator (1)
- Agriculture and Rural Development Specialist (2)
- Agricultural Business Specialist (3)
- Agronomy Specialist (4)
- Business Development Specialist (5)
- Civic Communications Specialist (6)
- Community Development Specialist (7)
- Dairy Specialist (8)
- Family Financial Education Specialist (9)
- Horticulture Specialist/Educator (10)
- Housing and Environmental Design Specialist (11)
- Human Development and Family Studies Specialist (12)
- Livestock Specialist/Educator (13)
- Natural Resource Engineering Specialist (14)
- Nutrition and Health Education Specialist (15)

Q27 How many years have you worked for the Cooperative Extension organization in Missouri?

Q28 I identify myself as:

- Male (1)
- Female (2)
- Prefer to not specify (3)

Q30 What is your marital status?

- Married (1)
- Single (2)
- Prefer not to answer (3)

Q31 How many children under the age of 18 do you have that are your dependents?

- More than 3 (1)
- 3 (2)
- 2 (3)
- 1 (4)
- 0 (5)

Q29 Select the range, by checking the box, that best describes your current age:

- 20-25 (1)
- 26-30 (2)
- 31-35 (3)
- 36-40 (4)
- 41-45 (5)
- 46-50 (6)
- 51-55 (7)
- 56-60 (8)
- 61-65 (9)
- 65+ (10)

Q32 What is your current annual salary range?

- Below \$25K (1)
- \$25-29K (2)
- \$30-34K (3)
- \$35-39K (4)
- \$40-44K (5)
- \$45-49K (6)
- \$50-54K (7)
- \$55-59K (8)
- \$60-64K (9)
- \$65-69K (10)
- \$70-74K (11)
- Over \$75K (12)

Q34 On average, how many hours a week do you spend in work-related activities?

- Less than 20 (1)
- 20-25 (2)
- 26-30 (3)
- 36-40 (4)
- 41-45 (5)
- 46-50 (6)
- 56-60 (7)
- 60+ hours (8)

Q33 On average, how many hours a week do you spend on family related activities?

- Less than 20 (1)
- 20-25 (2)
- 26-30 (3)
- 36-40 (4)
- 41-45 (5)
- 46-50 (6)
- 56-60 (7)
- 60+ hours (8)

Q32 How would you describe your race and national origin?

- American Indian or Alaskan Native (1)
- Asian (2)
- Black or African American (3)
- Hispanic/Latino (4)
- Native Hawaiian or Other Pacific Islander (5)
- Two or More Races (6)
- White (7)
- Prefer not to specify (8)

Q35 Please indicate the highest degree you have received.

- Bachelors (1)
- Masters (2)
- Doctoral (3)
- Other (4) _____

Q37 Were you involved in 4-H as a youth?

- Yes (1)
- No (2)

Q38 Did you have any agriculturally related work experience prior to entering the field of extension education?

- Yes (1)
- No (2)

Q39 If yes, please list type of work and years of experience:

Q42 Thank you for completing the questionnaire. If you would like to be entered into a drawing for an Amazon gift card (four \$25 cards will be given) type your email address below. If you provide an email it will only be used for the drawing and will not be connected to any information or answers you have provided.

Appendix C: Reminder Letter

Extension Support and Challenges Reminder Notice

Dear Selected Extension Educator,

If you have already completed the survey...thank you for your insight! If you have not, please do so by today **Monday, October 3, 2016** to have your thoughts included. See original invitation below for more information about the research. The title of this study is *Perceived Support and Challenges Faced by Extension Specialists and Educators* (IRB #2005735).

Best Regards,
Brenda Arnold & Jon Simonsen

Dear Extension Educator,

My name is Brenda Arnold and I am the University of Missouri Extension Livestock Educator based in Lewis County. I am also an Agricultural Education graduate student. My thesis research is focused on determining challenges agricultural Extension educators face in their careers and how support and mentoring play a role in development. Please take a few minutes to complete the survey by clicking on the link below by [Date]. The survey should take less than 10 minutes to complete. Your name will not be connected to your responses so all of your answers will be confidential. Upon completing the survey you will have the opportunity to enter in a drawing for one of four \$25 gift cards that will be given.

Your participation in this study is voluntary and you may choose to withdraw at any time without penalty or consequence. There are no known risks resulting from your participation and no direct benefit from your participation is expected. There is no cost to you. Please use the following link to complete the questionnaire:

Survey Link: [Link]

If you have questions, please do not hesitate to contact me at arnoldbr@missouri.edu or 573-767-5273. If you have questions about your rights as a research participant, you may also contact the staff in the Office of Research Campus Institutional Review Board at the University of Missouri at 573-882-9585. The title of this study is *Perceived Support and Challenges Faced by Extension Specialists and Educators* (IRB #2005735).

Sincerely,

Brenda Arnold & Jon Simonsen

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