

GROWING INTO LEADERSHIP: A STUDY OF THE INFORMAL AND INCIDENTAL
LEARNING OF WOMEN AGRICULTURAL DEANS AND VICE PRESIDENTS

by

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(Under the Direction of Laura L. Bierema)

ABSTRACT

Women comprise 35% of faculty positions within biological/agricultural/environmental life sciences and related fields at four-year institutions across the United States (National Science Foundation, 2008a). The percentage of women in science-based academia dramatically drops when looking at the positions of full professor, department head, dean and vice president. According to a list published by the Association of Public Land-Grant Universities (2013), there are 107 land-grant colleges each with administrative positions within a college or department of agriculture where women deans comprise 6% of the academic dean population.

For the purposes of this qualitative study, a comprehensive sample of 14 women, vice presidents and deans of colleges of agriculture, were interviewed to learn what incidental/informal learning experiences occurred as a result of a critical incident(s) that informed their leadership views and practices.

Utilizing critical incident technique, this study found themes for critical incidents among the administrators including: Managing the Arbitrary Workplace Phantom of Microaggression, Weathering Complex Workplace Relationships, Developing Leadership Through Sponsorship, and Evolving Amidst Adversity. The women mentioned that through these incidents they

engaged in informal/incidental learning that had influenced their leadership practices. Themes in their learning were that the women strived to: Decode the Spoken/Unspoken Cultures of Academic Leadership, Maintain Authenticity and Apply Necessary Mirroring Behaviors, Purposefully Create an Inclusive and Civil Work Environment, Embrace their Personal Power as an Administrator, and Develop a Leadership Persona.

Three conclusions were revealed as a result of this study. Women deans and vice presidents with agricultural governance responsibilities in higher education have: 1) traditionally lacked access to existing leadership networks and have learned how to lead as a student of their environment, employing informal and incidental learning strategies 2) resourcefully managed to endure difficult circumstances, withstanding very challenging situations and relationships, often turning them into opportunities for self-growth 3) successfully learned to navigate the patriarchal culture to transcend existing norms, making dynamic impacts in their workplace environments through transformational leadership practices. For future research, transfigurative leadership is a newly proposed model where the leader personifies situational relevance exhibiting the ability to shape-shift in order to reach individual or organizational goals based-on context.

INDEX WORDS: Agricultural Leadership in Higher Education, Informal/Incidental Learning, Women in Agricultural Leadership, Women's Leadership, Women Learning at Work

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DEDICATION

This dissertation is dedicated to the women who participated in this study. Thanks for sharing your time and lived experiences so that others may learn from you. Each one of you is inspirational.

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CHAPTER 1

INTRODUCTION

In 1903, Marie Curie the legendary scientist who discovered radium, became the first woman to receive the Nobel Prize in Physics; after which, she won an additional Nobel Prize in Chemistry in 1911 (Nobel Media, 2013). Before it was socially acceptable for women to choose academia as a career, Dr. Curie, was the first female professor at the University of Paris and often recruited women to work in her laboratory, encouraging them to pursue careers in science. Scientific discoveries in radium have allowed for advances in medicine, impacting millions of lives.

Marie Curie understood that progress is never swift or easy. Women's involvement in the academy has grown in record numbers, but science, specifically the field of agriculture, has traditionally lagged behind in participation and leadership for women. In 2008, four-year educational institutions in the United States employed 77,100 doctoral level individuals in biological, agricultural, environmental life sciences and related fields in academic faculty positions (National Science Foundation, 2008a). Only 3.7% of women are serving in senior administrative roles as dean of the college of agriculture at their institution. The glass ceiling may seem shattered from the perspective of some, but research continues to demonstrate that there are key issues that afford dialogue and discourse as it relates to women's leadership in the workplace especially in male-dominated settings such as the agricultural sciences at land-grant institutions of higher education.

Role of Land-Grant Universities as Providers of Adult and Higher Education

In the late 1700s and early 1800s, higher education was considered a privilege for the social elite (National Association of State Universities and Land-Grant Colleges, 1995). Universities such as Harvard and Yale offered study in philosophy and literature, among other majors in the fine arts and humanities. Justin Smith Morrill, a Representative and later Senator from Vermont, was instrumental in passing the Morrill Act of 1862 in response to a nation's cry for advanced education applicable to meet the needs of a broad citizenry (National Association of State Universities and Land-Grant Colleges, 1995). Signed into law by President Abraham Lincoln, land-grant institutions were established with the mission to "teach agriculture, military tactics, and the mechanic arts as well as classical studies so that members of the working classes could obtain a liberal, practical education" (National Association of State Universities and Land-Grant Colleges, 1995, p.3).

The Second Morrill Act (1890) extended access of higher education to universities who made no distinctions in race admissions; however, states that provided "a separate institution for blacks were eligible to receive funds" (National Association of State Universities and Land-Grant Colleges, 1995, p.3). As a result of this legislation, in mostly southern states where desegregation had not occurred, 17 historically black colleges often referred to as 1890 land-grants were formed (e.g., Fort Valley State University) (National Association of State Universities and Land-Grant Colleges, 1995). In subsequent years, the land-grant system expanded to include U.S. jurisdictions (beginning in 1967) and, most recently, tribal colleges beginning in 1994 as a provision of the Elementary and Secondary Education Reauthorization Act (National Association of State Universities and Land-Grant Colleges, 1995).

Role of Cooperative Extension as Public Service and Outreach in Higher Education

Perhaps the largest impact on adult education as a part of the land-grant mission, was the creation of the Cooperative Extension Service through the Smith-Lever Act of 1914 (Sanderson, 1988). Cooperative Extension provides support for land-grant institutions to offer educational programs to enhance the application of useful and practical information beyond their campuses (Sanderson, 1988). In the beginning, these outreach programs were based on agriculture and home economics. Today, Extension education has expanded to be delivered in three program areas: agriculture and natural resources, family and consumer sciences, and 4-H which serves youth ages 10-18 years (Sanderson, 1988).

Before the Smith-Lever Act was signed into law, Extension work had already begun as a grassroots movement with “large groups of people working together to improve agricultural techniques and disseminate agricultural information within private organizations or agricultural societies” (Comer, Campbell, Edwards, & Hillison, 2006). Seaman A. Knapp, often credited as the father of Extension, was the leader of the demonstration movement where instructors would travel around and hold public meetings to showcase innovative agricultural practices (Comer et al., 2006). Knapp’s notion was that if farmers could practice the approaches newly demonstrated on their own farms then they would be more willing to adopt them, and that is part of the foundation on which Cooperative Extension was built (Smith & Wilson, 1930).

Extension work was also beginning in the 1890’s at Tuskegee Institute under the direction of Booker T. Washington (Comer et al., 2006). Building off of Knapp’s demonstration idea, Washington worked with Carver to “pack tools in a buggy and visit rural communities across the county and put on demonstrations” (Campbell, 1969; Comer et al., 2006).

Washington and Carver were instrumental in beginning the Cooperative Extension Service in historically black colleges and universities reaching millions with their effective research, teaching, and outreach efforts (Comer et al., 2006).

Current Role of Land-Grant Universities as Providers of Adult and Higher Education

Today, there are 107 institutions conferred with land-grant status (Sanderson, 1988). In recent years, there has been a national movement for land-grant universities to renew their public work agenda in the form of engagement with the communities and the populace of which they serve (Sandmann & Weerts, 2008). Over time many land-grant institutions, especially large research universities, have formed “firm structural and cultural boundaries” in order to “maintain their historical roles as gatekeepers and disseminators of knowledge” (Sandmann & Weerts, 2008, p. 183). A revival of innovation and diffusion through engagement programming such as “The Archway Partnership at the University of Georgia,” is spanning the boundaries between the university and the community, more closely opening the university to grassroots dialogue and information exchange (Garber, Creech, Epps, Bishop, & Chapman, 2010)

An increasing number of adult learners are utilizing an academy of higher learning to pursue professional degree programs or obtain certifications in fields that are relevant to today’s job market (Academic Leader, 2004). In 2004, nearly half of all college students were 25 or older and the undergraduate population has been aging each year (Academic Leader, 2004; National Center for Education Statistics, 2010).

Malcolm Knowles (1984) work on andragogy reveals that adults tend to be much more autonomous and self-directed in their learning. In addition, adults have had life experiences that contribute to the understanding of their learning and enjoy assignments that are relevant to their life goals and produce relatable outcomes (Knowles, 1984). Online and/or distance education has

expanded in recent years and is very popular with the adult audience due to the nature of the online learning experience (Academic Leader, 2004). Land-grant universities are able to connect the resources of diverse course offerings, delivery methods, exemplary faculty, and scholarship to meet the needs of the growing adult learner population.

Executive Leadership in Land-Grant Institutions of Higher Education

“In this world of information superhighways, student consumerism, increased calls for accountability, and rising costs of education, (the role of) academic leadership has become even more complex and multidimensional” (Bisbee, 2007, p. 77). Gaither (2002) suggested that a new view of executive leadership could be traced to the metamorphosis of organizational structure into multi-campus institutions, the expectation of a more diverse work force, and a movement towards a quality academic experience. While performance expectations of higher education employees have increased, responsibilities and accountabilities have also increased (Bisbee, 2007). In addition to a complex and decentralized internal environment, higher education leadership has been challenged to be responsible to an ever-growing number of external constituents (Bisbee, 2007). Globalization and the technological age have required universities to understand how to serve and reach an even more diverse population. This continued call for a cutting edge university community, coupled with an injured economy and resulting lower tax revenue, has challenged the abilities of traditional leadership in higher education land-grant universities to meet those needs.

Women constitute half of the participation in today’s workforce but still are unequal to men in pay, promotion, and benefits, among other economic rewards (Knoke & Ishio, 1998; U.S. Department of Labor, 2010). In the new millennium, women face barriers to achieving positions of leadership such as sex stereotyping of occupations and the historically patriarchal nature of the

workplace leadership culture. Many more times than not, discrimination based on gender is a silently embedded and accepted piece of the workplace culture (Meyerson & Fletcher, 2000). “Governmental policies, business practices, and research agendas lag behind the pace of workplace diversification” (Bierema & Cseh, 2003, p.5). Informal/incidental learning through lived experience, as compared to formal training, plays an instrumental role in women’s leadership development. Within informal/incidental learning from these critical incidents, what are the messages that women in leadership internalize to inform their future leadership practices?

Women as Administrators in Higher Education

According to the National Center for Education Statistics (2010), 217,000 individuals served in executive/administrative/managerial capacities within all of the degree-granting institutions in the United States in 2007. Specifically, in public four-year institutions, there were 81,364 employees considered administrative with men and women comprising almost equally 50% of those positions but with only 3% of presidencies within these institutions held by women (National Center for Education Statistics, 2010). The literature reveals continuing barriers for women in higher education administration seem especially pronounced in departments of science and engineering (Etzkowitz, Kumelgor, & Uzzi, 2000; Nelson & Rogers, 2004), where only 19% of full professors are women in four-year colleges and universities overall, with even lower representation in research institutions (NSF Science and Engineering Indicators, 2008b).

Literature on academic deans reveals that often the deans rose to high positions early in their careers and intentionally practiced building their leadership skills (Isaac, Behar-Horenstein, & Koro-Ljungberg, 2009). Another reoccurring theme from studies is that many of the women never explicitly planned to be dean, but they were excelling in their roles, and the opportunity just happened upon them (Issac et al., 2009). When questioned about their personal leadership

style, the women deans used terms that were loaded with feminine discourse. Leadership was not learned through courses, but the mechanisms of society, as well as the identities and intrinsic drives of these individuals (Issac et al., 2009, p.149). Women deans tend to reference relationships, experiences, and ideologies as giving knowledge to their leadership practices.

In higher education, there are missing voices of women in positions of power, especially within the traditionally male-dominated field of agriculture (U.S. Department of Labor, 2010). Women have always been involved with agricultural work, but it has been within the past fifty years that women were accepted as members of many agriculture clubs and/or organizations. Now, fast-forward to 2013 and glance around the room of agricultural administrators at land-grant universities. Even in a new paradigm filled with women working at the bottom of the academic ranks, one might ask the question... Where are the women represented at the top?

Largely due to a push from the National Science Foundation for their work in funding Science, Technology, Engineering, and Math (STEM) programs for women, undergraduate and graduate numbers for women completing science degrees have increased exponentially over the last ten years. Beginning in 2008, the College of Agriculture and Environmental Sciences at the University of Georgia had slightly more women enrolled than men and the trend looks to be continuing (University of Georgia College of Agriculture and Environmental Sciences, 2011). Women leaders in male-dominated disciplines have been largely understudied, and even more under-researched are women serving in agricultural leadership roles in higher education.

As an undergraduate student, I majored in agriculture and attended a large public land-grant university. After applying for several positions, I entered into the workplace at an entry-level job with cooperative extension. After several years of work, I was concerned when a female mentor within a college of agriculture, who was highly qualified and deserving of a

promotion, did not receive consideration for a position that was well within her area of expertise and service. I began to take notice of similar situations where it seemed that over and over again women, at universities, tended to “get stuck” within the confines of lower level employment and middle management until the “chosen ones” were asked to serve in some capacity at the top of the organization.

In 2011, out of 107 colleges of agriculture across the nation, only four female deans were identified. In 2013, there are eight female deans with three additional women serving in interim dean roles. Three women serve as vice president of an agricultural related function at the university level. One woman serves as a dean and vice president. Historically, women seem to be more often considered for the positions of associate or assistant dean, but are rarely chosen as dean or vice president of the college. For the few women who have made it to positions within upper management, it seems as if the pipeline is leaking for women who desire to explore their dreams of leadership. It seems that many of these women are the first of their gender within this field to hold the position of dean or vice president at their institution. Within these experiences lie many questions for exploration about women in leadership and the learning which occurs over their careers which has helped prepare them to lead in the position of dean or vice president of a college.

Women who work full-time tend to spend a majority of their life in the workplace, and during these working hours, they gain knowledge through formal and informal learning (Marsick, Watkins, Callahan, & Volpe, 2010). Simply stated, “informal learning is learning outside of formally structured, institutionally sponsored, classroom-based activities” (Watkins & Marsick, 1992, p. 288). Informal learning, in many situations, takes place when the learner is involved in circumstances that are not part of the routine. As decisions and procedures are

exercised that are out of the normal scope of activities, learners may find themselves in circumstances where they have to “re-think situations” and “re-frame their understanding of the kind of learning that they might need to undertake” (Marsick et al., 2010, p. 571). Incidental learning can be semi-conscious and accidental while informal learning can possibly be planned or intentional (Marsick et al., 2010).

The benefits of informal and incidental learning are that they are linked to meaningful job activities (Marsick et al., 2010). When informal and incidental learning take place, more than likely the learning is directly linked to a situation that is happening in the immediate work environment of the individual (Marsick et al., 2010). Through conscious “attention, reflection, and direction” incidental and informal learning can become highly valuable both to the learner and the organization for which they work (Marsick et al., 2010, p. 572).

The literature surrounding informal and incidental learning as it relates to women in leadership, especially at institutions of higher education, is sparse. Even though research on women administrators in higher education has gained increased attention in recent years, the focus has been inconsistent and across many different domains. Additionally, specific research studying women administrators of colleges of agriculture is all but non-existent. Both quantitative and qualitative data are needed to determine how women learn through critical incidents that affect their leadership. For these reasons, this research study is necessary and proposes to analyze informal and incidental learning from women administrators within colleges of agriculture across America.

Statement of the Problem

According to the most recent national survey data, in 2010 women comprised 47% of the workforce (U.S. Department of Labor, 2010). Yet, women only hold 15% of corporate executive

positions in top companies worldwide (Carter & Silva, 2010a) and only 4% of Fortune 500 CEO spots (Catalyst, 2013). Progress is occurring for women to infiltrate into executive positions, but it is happening at a glacier-like pace (Board of Directors Network, 2010). If current rates of change persist, it will be nearly 300 years before women are as likely as men to become top managers in major corporations or achieve equal representation in congress (Rhode, 2003). Barriers to women reaching executive leadership positions that are identified in the literature include things such as, inflexible work schedules, lack of opportunities for training and advancement, perceptions of women as leaders by others, and the relational nature by which many women learn and lead in male-dominated organizational cultures (Bierema, 2001; Issac et al., 2009).

Leadership in higher education is a traditionally male-dominated setting (American Council on Education, 2007; Issac et al., 2009; Lafreniere & Longman, 2008; Tedrow & Rhodes, 1998). Especially among public universities, women are typically overrepresented as students, but underrepresented as trustees, administrators, and faculty (Muller, 1978; Scollay, Bratt, & Tickameyer, 1997; Twale & Shannon, 1996). Even in 2013, throughout colleges of agriculture across the nation, many dean roles have never been held by women. Researching women agricultural leaders in higher education will reveal essential information regarding the process of informal/incidental learning on their career development and also their views and practices of leadership. How do women in higher education leadership learn to become leaders? Looking back on their careers, what messages did the women deans and vice presidents informally learn about their leadership through critical incidents?

Leadership is learned through a variety of different modalities. Informal and incidental learning manifest through critical experiences that happen in settings such as professional

development conferences, group interactions, peer mentoring scenarios, and watching others who successfully operate within their work contexts. Studies suggest that informal and incidental learning can contribute to nearly 80 % of how workers learn to do their jobs (Mishra, Laff, Jarventaus & Ketter, 2007). Specific to this study, knowledge gained through informal learning is perhaps one of the most understudied, but valuable, ways of learning that women experience while working on the job. What does that mean for women in leadership? How do women working in the context of higher education learn to become leaders?

Purpose of the Study and Research Questions

Examining the data through a critical feminist lens, this study analyzed interviews with a comprehensive sample of women in agricultural leadership positions, specifically deans and vice presidents, at land-grant institutions of higher education. The study determined what incidental/informal learning experiences occurred as a result of a critical incident(s) that inform the leadership views and practices of women deans of colleges of agriculture or institutional vice presidents with agricultural governance responsibilities. Fundamental questions guiding this study were:

1. What common critical incidents inform the practice of women deans and vice presidents in the male-dominated field of agriculture?
2. How do informal and incidental learning shape the practices of women deans and vice presidents in the male-dominated field of agriculture?

Significance of Study

The lack of women in positions of power within land-grant universities has offered an opportunity for essential research to be conducted on the experiences of women administrators within the higher education workplace culture. While community colleges have had more

success with women entering leadership roles, the literature on land-grant universities suggests that is not the case within these organizations. Qualitative studies can collect specific situational data and reveal valuable perspectives from women who are leaders in higher education. Through interviews and data collection on informal learning from critical incidents in the careers of women vice presidents and deans of colleges of agriculture, we can discern more about the learning that occurs to inform their views and practices of leadership. Due to the fact that there are limited research studies on women leaders in agriculture, any discoveries would certainly inform prospective leadership and create space for institutions of higher education to understand this unique population.

The U. S. Department of Education (2012) reported, that 57 % of bachelor's, 62 % of master's, and 53 % of doctoral degrees in 2009-2010 were obtained by women. Since the mid-1990s, women have outpaced men in post-secondary degree attainment, but are not receiving the same opportunities for advancement as their male counterparts (U.S. Department of Education, 2012; Catalyst, 2007). As additional research is conducted, and more national attention is given to the issue of women in male-dominated disciplines, we can have further dialogue surrounding the barriers women may face in achieving leadership positions within these ranks. Research on incidental and informal learning through critical incidents can also further the discourse surrounding the issue of organizational climate and women in leadership positions. Bringing forth research to inform practices in human resources and organizational development is important to equip organizations with the tools to prepare women to flourish while holding managerial roles.

Globalization and the technological age have required universities to understand how to serve and reach an even more diverse population exhibiting greater diversity within its leadership

composition. From the research conducted, narrow qualitative or quantitative studies on women deans and directors have been published. Limited research, if any, has been conducted from the perspective of a woman dean of a college of agriculture in the United States. Women deans or CEOs in male-dominated disciplines such as agriculture are an anomaly and have been widely ignored in empirical work.

Definition of Terms

Glass Ceiling – Metaphor that describes the invisible barriers or deficiencies that women in leadership can face that could keep them from attaining their ultimate career goals (Morrison & Von Glinow, 1990).

Glass Cliff – Metaphor to describe women who have made it through the glass ceiling to obtain a position of power but are set up to fail because of the lack of resources and/or support from the organization (Ryan & Haslam, 2005).

Informal and Incidental Learning – is “learning outside of formally structured, institutionally sponsored, classroom-based activities” (Marsick et al., 2010).

Land-Grant Institutions – Formed in response to a nation’s cry for education to meet the needs of a broad citizenry, public state sponsored sites of higher learning have a three-fold mission of teaching, research and service (Herren & Edwards, 2002).

Leadership – is “a process whereby an individual influences a group of individuals to achieve a common goal” (Northouse, 2007, p.3).

Microaggressions – Covert or subtle aggressions conducted by a dominant power group or individual towards an underrepresented group or individual to reinforce the positionality and power within the structure of the group (Pierce, 1972).

CHAPTER 2

REVIEW OF LITERATURE

Examining the data through a critical feminist lens, this study will analyze interviews with a comprehensive sample of women in agricultural leadership positions, specifically deans and vice presidents, at land-grant institutions of higher education. The purpose of this study was to determine what incidental/informal learning experiences occurred as a result of a critical incident(s) that inform the leadership views and practices of women deans of colleges of agriculture or institutional vice presidents with agricultural governance responsibilities.

Fundamental questions guiding this study were:

1. What common critical incidents inform the practice of women deans and vice presidents in the male-dominated field of agriculture?
2. How do informal and incidental learning shape the practices of women deans and vice presidents in the male-dominated field of agriculture?

For the purposes of this literature review, I will begin by examining critical feminism, the macro-level theory informing this study; then, the proposal will continue by laying the mid-level theoretical framework of informal/incidental learning. Next, the chapter will thoroughly examine the literature surrounding women in the workplace, higher education, and leadership. Literature surrounding these topics is expansive; however, there is limited literature that explores informal/incidental learning of women in leadership within the context of higher education which necessitates this study.

Critical Feminism

The macro-level theory that will guide the work of this study is critical feminism.

“Feminism is defined as the belief that men and women are equal and should have equal respect and opportunities in all spheres of life--- personal, social, work, and public” (Wood, 2008, p.324). In feminist theories, the concept of “sex” is different from that of “gender.” “Sex is a biological category--- male or female--- that is determined genetically. Gender comprises “social definitions of masculinity and femininity at specific historical moments and in specific cultural contexts” (Wood, 2008, p. 324). Gender is often considered the social construction of women as women, reinforced through socialization that occurs in everyday life. Butler (1990) suggests the notion that gender is not merely learned behavior, but it is an identity socialized through learned behavior repeated throughout daily interactions. Therefore, in conversational patterns, presentation of self, listening behaviors, or observing others, women find themselves creating and re-creating the female gender.

Rosemarie Tong, a leader in feminist thought, discusses feminist theorists who could identify their approach as liberal, Marxist, radical, psychoanalytic, socialist, existentialist or postmodern, each having their own methodological lens in which to answer questions about the feminine lived experience. Tong (2009) stated that in any type of feminist theory we “lament the ways in which women have been oppressed, repressed and suppressed and...celebrate the ways in which so many women have ‘beaten the system,’ taken charge of their own destinies, and encouraged each other to live, love, laugh, and to be happy as women” (p. 2). Understanding the feminine experience is a piece of making meaning of power relationships and leadership dynamics in a workplace setting.

Critical perspectives can focus on power, control, competing sets of ideologies, and group dominance. Discovering how power is created, destroyed, resisted, and reproduced are all focuses of critique in critical theory. Foucault's (1982) notion of power relations, capacities, and communication inform much feminist work around this area. Further, Foucault (1982) acknowledges that power relations are often intertwined with other types of relations. In some cases, critical theorists want to understand how "oppressed groups become empowered" and how to "change dominant patterns and perhaps the ideologies that underlie them" (Wood, 2008, p. 326). Historical patterns, missing voices, and group ideologies among other indicators must all be analyzed to discover the power dynamics that can be changed to provide freedom to individuals to find *ethos* (Foucault, 1982).

"Critical Theories aim to identify prevailing structures and practices that create or uphold disadvantage, inequity, or oppression, and to point the way toward alternatives that promote more egalitarian possibilities for individuals, relationships, groups, and societies" (Wood, 2008, p. 325). In critical theory, scholars are not pacified by the explanation of power and control in relationships but want to move towards finding a way to affect a solution for social change. "A transformative reach, from personal empowerment to collective global action, is vital to any critical analysis" (Ledwith, 2009, p.695). Critical theorists are often looking for practical application strategies and ways to advocate for equality in the societal and cultural systems being researched.

Intersection of Critical and Feminist Theories

Critical Feminism enables scholars to deconstruct power relationships in the context of women's real life events. Critical Feminism is not only research and reflection, but also a call for recognition and action in issues related to empowering women. Through this macro-level

theoretical perspective, scholars can effectively engage in understanding more about women executives in male-dominated fields such as agriculture, and how incidental/informal learning has informed them in the workplace. Critical Feminism creates an opportunity for informed discourse surrounding important issues in the lives of women, and empowers each gender to discover new possibilities, ways of knowing, understanding, and acting. Using this lens to analyze incidental learning in the workplace, we can understand more about the power relationships that influence the women and their learning.

Antonio Gramsci, Italian philosopher and writer from Marxist thought, contributes concepts to critical feminist theory through his notion of cultural hegemony (Crotty, 2006; Ledwith, 2009). Hegemony is when a dominant power group maintains their own common sense ideologies in many instances at the expense of other non-power groups (e.g., white male leadership as a dominant power group in higher education administration) (Ledwith, 2009; Kitlinger & Wilkinson, 1996). In some instances, the oppressed group maintains its own oppression through a sense of false consciousness that can be reinforced by the dominant power group (Crotty, 2006; Ledwith, 2009). Feminist thought allows us to explore the notion that the personal is political, and that women should be allowed and expected to critically evaluate their lives, realizing that political implications are happening to and around them (Farmer, 2008). In the workforce, this allows women to look at their environment and ask questions to gain insight and understanding about not only their role, but the role of others. Critical feminism is a large piece of the theoretical frame for analyzing the informal/incidental learning that informs the leadership of deans and assistant/associate deans in colleges of agriculture at institutions of higher education.

Women in the Workplace

According to the United States Bureau of Labor Statistics, in 2009 women comprised 47% of the workforce in the United States (U.S. Department of Labor, 2010). Women now hold 15% of corporate executive positions in top companies worldwide and three percent of Fortune 500 CEO spots (Carter & Silva, 2010a). In plain numbers, that means there are 16 women and 484 men holding chief executive officer positions in the world's most profitable corporations. In the state of Georgia, 10.5 % of executive officers in public companies are women (Board of Directors Network, 2010). In 2007, however, four in ten businesses worldwide still reported having no women in senior management, a figure that has been largely unchanged since 2004 (Grant Thornton, 2007).

Even with the relatively low numbers of women in these roles, just 30 years ago there were not any women who held chief executive titles in Fortune 500 companies (Carter & Silva, 2010a). Progress is occurring for women to infiltrate into executive positions, but it is happening at a glacier-like pace (Board of Directors Network, 2010). If current rates of change persist, it will be nearly 300 years before women are as likely as men to become top managers in major corporations or achieve equal representation in congress (Rhode, 2003). Historically, women have found themselves in positions subordinate to men with a comparably lesser salary.

Women's History in Workforce Participation

"The starting point of critical elaboration is knowing what one really is ... as a product of the historical process to date which has deposited in you an infinity of traces, without leaving an inventory" (Gramsci, 1971, p. 324). In 2010, even though women held nearly half of all positions in the workforce, women have continually entered into lower-status, lower-paying jobs, and remain clustered in a number of conventional careers (Domenico & Jones, 2006; Tinklin,

Croxford, Ducklin, & Frame, 2005). Low-paying traditional female careers, “including administrative support, sales, service, nursing, teaching, social work, and clerical jobs, reflect society’s persistent attitudes regarding stereotypical occupational roles for males and females” (Domenico & Jones, 2006, p.1; Rainey & Borders, 1997; Sellers, Satcher, & Comas, 1999; Stephenson & Burge, 1997; Watson, Quatman, & Elder, 2002). The factors that could contribute to narrowing women into the societal traditional occupation roles are “social and familial influences, a lack of awareness regarding nontraditional options, an unwelcoming environment in many male-dominated fields, discrimination within career fields, high turnover rates for women, and less seniority in given occupations” (Domenico & Jones, 2006, p.1).

Integrating women into the workforce. Women’s entering into the workforce was a slow process that was not often viewed favorably by society (Nieva & Gutek, 1981). In the past 30 years the world’s view of a woman’s role in the working environment has significantly changed. Today, more women are formally employed in the workforce than ever before. The chart below represents the most recent national survey data on women’s workforce participation (U.S. Department of Labor, 2010).

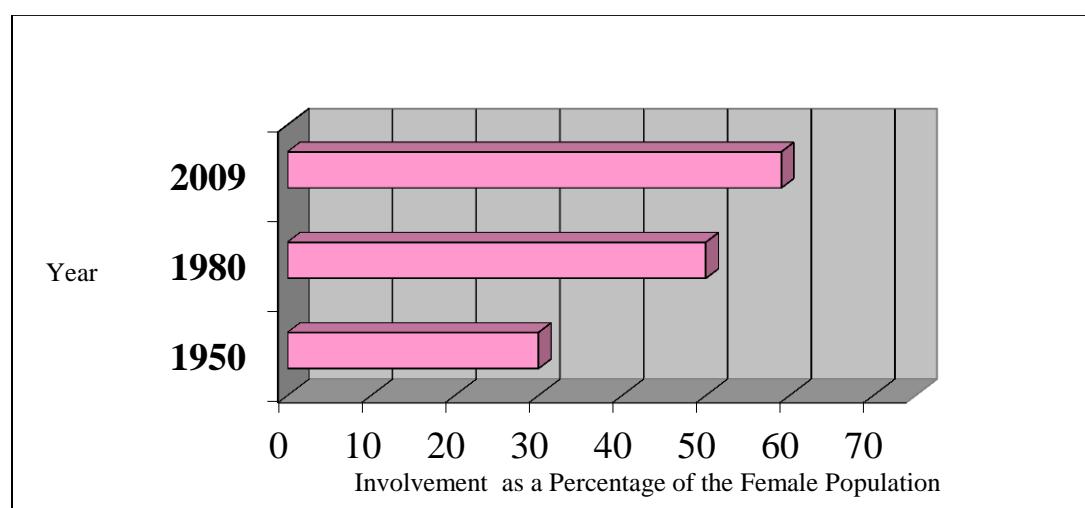


Figure 1. Women’s workforce participation in the United States.

In 1950, only 30% of women worked outside the home and that number increased to 50% by 1980 (Astin, 1984; Stephenson & Burge, 1997). In the mid 1990s, the stay-at-home housewife and breadwinning husband characterized only 7% of American families and constitutes even less in the new millennium (Jalilvand, 2000; Stephenson & Burge, 1997; Tinklin et al., 2005). In 2009, 59 % of women were participants in the workforce (U.S. Department of Labor, 2010). Despite common barriers to women's workforce participation including, sex-typing of occupations, sex discrimination, and lack of available/affordable childcare, recent studies have revealed females are showing interest in a greater number of careers and exhibiting more gender-role flexibility in aspirant occupations than males (Brown & Barbosa, 2001; Domenico & Jones, 2006; Francis, 2002; Mendez & Crawford, 2002; Stitt-Gohdes, 1997; Wahl & Blackhurst, 2000). Increased gender-role flexibility in aspirant occupations could lead to more women pursuing non-traditional roles and in turn influence the work environment when critical mass is reached.

The workplace environment. The Director of the United Nations Division for the Advancement of Women stated, "Among the main constraints to moving forward on gender equality and empowerment of women are deeply entrenched negative attitudes and stereotypes, which are institutionalized in society" (Hannan, 2004, p.9). The devaluing of women's leadership abilities seems to be a very common and accepted form of silent discrimination occurring within workplaces across America. Gramsci's notion of powerful cultural hegemonic groups that control society through a "common sense" ideology can be applied to critique the current executive level workplace environment where there is a deficiency of women executives.

Historically male-dominated organizational leadership fosters the hegemonic ideologies of mostly white men to be perpetuated throughout workplace systems. Women must learn to

successfully navigate workplace structures, and in many cases emulate the successful, in order to reach a leadership position (Bierema, 2001; Mainiero, 1994). In Bierema's (2001) article "Women, Work, and Learning" she writes:

According to these studies, career success is dictated by assuming masculine attributes, stereotyping gender roles, and following a set of rules for success. The result of these dynamics is the acculturation of women into male work culture, devaluation of women's gender roles, and deprivation of women's identity. Women's need or desire to buy into the old-boy network may be explained by either suppression or unawareness of themselves as gendered beings (Bierema & Cseh, 2000; Caffarella, Clark, & Ingram, 1997). Women's uncritical career development not only causes them to adapt to a masculine model but also prevents them from addressing power differentials or claiming a career on their own terms as women. (p.57)

General unawareness, lack of encouragement for critical thought, or difficulty finding their own voice in their current work environment, could lead women to divert from pursuing intentional strategies to develop themselves in the workplace (Bierema, 2001; Bierema, 2005). Other factors, such as society's mixed perception of women leaders (Catalyst, 2007) coupled with ineffective mentoring, promotion and compensation strategies (Ibarra, Carter, & Silva, 2010), are likely inhibiting women from attaining top positions within organizations as well. Studies in the field of organizational development reveal trends in the characteristics of women promoted throughout the organization who reach executive status.

Characteristics of Executive Women

Executive women are an anomaly in today's marketplace; however, patterns are emerging in the path to the C Suite. Research states that while women are "disproportionately

scarce among the most senior executives in 2001—and scarcer still in CEO jobs—those who arrived got there faster and at a younger age than their male colleagues” (Cappelli & Hamori, 2005, p. 31). In “The New Road to the Top” empirical study, of the corporations reviewed, women who had reached the executive level seemed to disproportionately outnumber men in important midtier positions such as senior vice president and executive vice president (Cappelli & Hamori, 2005, p.31). The type of industry and the corporation served also seemed to have a considerable effect on the percentage of women within the ranks of the organization. Women constituted 32% of top executives in health care, 25% in consumer products, and 17% in financial services while there were virtually no women in: manufacturing, chemicals, entertainment, or wholesale trade corporations (Cappelli & Hamori, 2005).

However, women who have reached executive positions have done so in a shorter time frame than their male colleagues and are less likely than men to be employed with the same company that hired them for their first job (Cappelli & Hamori, 2005). In 2001, the average age of a woman Fortune 100 executive was 47 years old (Cappelli & Hamori, 2005). These women had a 32% chance of being promoted from within the same company throughout their career (Cappelli & Hamori, 2005). Additionally, each woman spent an average 3.4 years in each job they held within their career and took approximately 21 years to reach their current executive level position (Cappelli & Hamori, 2005). In comparison, male executives were on average 52 years old, holding each job for 4 years with 25 years of experience before achieving their current position (Cappelli & Hamori, 2005). Subsequently, 47% of men were likely to have stayed with the same company that now had granted them an executive role (Cappelli & Hamori, 2005). Projections are that corporate executives of the future will be more likely to be women, have an advanced degree in fields such as law or business, and have graduated from a public institution

of higher education (Cappelli & Hamori, 2005). With the likelihood of more women executives there is also a likelihood of increased availability of women to serve on corporate boards.

Women's Presence on Corporate Boards

Corporate boards are another place where executive women can show leadership. Out of 14 states reviewed by the InterOrganization Network's study on diversity at the top, Georgia had the highest percentage of companies without a woman on their executive board of directors which totaled 55% (InterOrganization Network, 2010). In Georgia's public companies, 8.6% of all board seats were held by women in comparison to 16% of seats in Georgia's Fortune 500 companies (Board of Directors Network, 2010). Only 1.7% of the board seats in Georgia were filled by women of color (Board of Directors Network, 2010). Coca-Cola Enterprises was found to be the most gender diverse organization with 33% of board members and 16% of top executives being women (Board of Directors Network, 2010).

Recent research on critical mass states that the presence of three or more women on corporate boards "leads to a more collaborative leadership style that focuses on listening, social support, and win-win problem solving" (Spearly, 2007, p.52). When only one woman is present in the conversation, women continue to face barriers such as gender stereotyping and discrimination, but the frequency of those barriers greatly decreases if three or more women are sitting at the table (Konrad, Kramer, & Erkut, 2008). Establishing a critical mass of women is essential to diversify group dynamics and include the voice of women in corporate discussion. Strategies have been employed within certain organizations to prepare women to succeed within the existing structure of the workplace.

Mentoring, Promotion, and Compensation of Women in the Workplace

Mentoring is a popular relationship building tool often used by organizations to build competency, networks, and train future leadership within an employee base (Rosser & Egan, 2007). “Individual journeys to chief executive positions in large organizations are likely influenced by social networks that include mentors” (Rosser & Egan, 2007, p.1). While positive mentor relationships can have beneficial outcomes for the protégé, women paired with men have increased difficulty developing a mentoring relationship (Laff, 2009). According to a recent survey, 83% of women and 76% of men say that they have had at least one mentor in their careers (Carter & Silva, 2010a). Of the women surveyed, 21% state that they have had four or more mentors as compared to 15% of men (Carter & Silvia, 2010a). In the women’s relationships, most of the mentors are not as senior-level as the mentors in men’s relationships (Ibarra, Carter, & Silva, 2010).

Research about mentoring practices reveals that not all mentoring relationships are of equal benefit to women. In some situations, there is a special relationship called sponsorship—“in which the mentor goes beyond giving feedback and advice and uses his or her influence with senior executives to advocate for the mentee” (Ibarra et al., 2010, p.82). Ibarra, Carter, and Silva’s (2010a) study entitled “Why Men Still Get More Promotions Than Women,” states that “high potential women are over-mentored and under-sponsored relative to their male peers—and that they are not advancing in their organizations” (p.82). Furthermore, if women are not sponsored in their mentor relationship, they will continue to be less likely than men to be appointed to top roles but may also be more reluctant to go for them (Ibarra et al., 2010, p. 82). Organizing effective mentoring relationships for women will require strategic placement on

behalf of the organization and vision for the protégé on behalf of the mentor in order to be a successful tool for women's career development (Laff, 2009; Ibarra et al., 2010).

Research literature suggests that, "Although women are mentored, they are not being promoted" (Ibarra et al., 2010, p.83). While women are graduating with a higher percentage of college degrees than men, are being mentored at higher rates, and are entering the workforce in larger numbers every year, discourse in the workplace relating to promotion and compensation of women seems to have caught some women in a sense of false consciousness even though research continually demonstrates the disparities. Recent empirical work, "The Pipeline's Broken Promise" surveyed more than 4,000 full-time-employed men and women with high potential who graduated from top MBA programs worldwide from 1996 to 2007 (Carter & Silva, 2010b). Data showed that the women were paid \$4,600 less in their first post-MBA jobs, occupied lower-level management positions, and have had significantly less career satisfaction than their male counterparts with the same education (Carter & Silva, 2010b).

Even when women make it to the chief executive officer position, equality in pay is not a guaranteed benefit. The sample population of women CEOs of Fortune 500 companies is very small in number and their salaries fall in a wide variety of ranges. Some of the women appear underpaid compared to their male counterparts while only a few women are paid more aggressively than the CEOs before their tenure. According to Forbes magazine, PepsiCo's CEO Indra Nooyi has an annual compensation package that is worth \$10.1 million, which is half that of her male counterpart, James Skinner, CEO of the McDonalds Corporation who receives \$21 million per year (Egan, 2010). Another large discrepancy in pay is found in Sunoco's Lynn Laverty Elsenhans' package at \$1.5 million, which lags considerably behind the male chief executive at rival refinery firm Tesoro who receives \$18.6 million annually (Egan, 2010).

Women CEOs are not in the majority and the career aspirations of these successful women may not have always been to take over a major corporation. Current empirical literature shows us that women, oftentimes, look to the other women around them for modeling and mentorship while forming their own personal career goals.

Women's Career Aspirations

Career aspirations of women develop differently than men and contribute to discourse in literature citing the limited numbers of women employed in certain industries. Research shows that career aspirations of individuals are influenced by factors such as gender, socioeconomic status, race, parents' occupation and education level, and parental expectations (Khallad, 2000; Watson, Quatman, & Elder, 2002). For women, studies show that the work habits of mothers have a significant influence on career aspirations of their adolescent daughters (Burlin, 1976; Wahl & Blackhurst, 2000). As more women enter into executive roles, research postulates that their daughters will have increased experiences and awareness within those settings. Increased exposure by mothers to daughters of their own leadership in the workplace environment could lead to increased career aspirations of daughters (or women) to pursue executive roles.

A Woman's Pathway to an Executive Role

Research on women executives shows that the women who reach executive status are doing so through a variety of pathways; however, there are similar themes in workplace events that can be identified. Mainerio (1994) interviewed 55 women for her study "Anointed for Executive" about the path that led them to their leadership roles. Shortly after their initial assignment within the organization, the women were given supervisory roles and were particularly successful in management (Mainerio, 1994). Subsequently, women worked with an upper level executive assisting corporate staff in a high visibility project that proved to be

successful (Mainerio, 1994). This common trend then led to a broader, more general managerial assignment within the organization before the women were promoted to the vice president level, reporting to a chief executive officer (Mainerio, 1994).

Through the series of events identified above, women must continually prove themselves by overcoming a series of hurdles such as: “1) Getting assigned to a high visibility project, 2) Demonstrating critical skills for effective job performance, 3) Attracting top level support, 4) Displaying entrepreneurial initiative, and 5) Accurately identifying what the company values” (Mainerio, 1994, p.1). Research supports the notion that women who have these experiences and maneuver through these hurdles are highly likely to attain leadership roles.

Even when women make it to the top, it can be a very lonely situation once they arrive. A critical mass of 35-40% of non-dominant group members in leadership positions is thought necessary to overcome the stigma associated with tokenism (Karsten, 1994). Research has also found that workplaces with at least 35% women are better working environments for women (Collins, 1998; Tolbert, Simmons, Andrews, & Rhee 1995) as the detrimental effects of solo status is removed. Having one-third of leadership employees who are women within an organization is quite opposite the common practice of advancing mainly the “star” women, or those who demonstrate achievement far surpassing both female and male colleagues. Attaining a critical mass of women in the leadership structure is especially important to position an institution for change. The observation that “few women want to go to places where few women are” describes a self-reinforcing cycle which requires diversity to interrupt (Steffen-Fluhr, 2006, p.1).

While women have been a major part of the workforce for the past fifty years, few studies have been done that ask questions about the organizational culture and climate in which

women work. Currently, available literature on women in the workplace allows us to ponder the stagnant dearth of women in management positions across the United States. Research does not begin to address informal/incidental learning of women in positions of leadership. This study will collect data to inform the understanding of key informal/incidental learning that occurs within women deans and assistant deans of colleges of agriculture.

Women in Higher Education

Leadership in higher education is a traditionally male-dominated setting (ACE, 2007; Issac et al., 2009; Lafreniere & Longman, 2008; Tedrow & Rhodes, 1998). Especially among public universities, women are typically overrepresented as students, but underrepresented as trustees, administrators, and faculty (Muller, 1978; Scollay, Bratt, & Tickameyer, 1997; Twale & Shannon, 1996). Relatively few women advance to top academic leadership positions such as dean, provost, president or chancellor, especially in land-grant institutions (Bilen-Green, Froelich, & Jacobson, 2008, p.3). An exception to this norm is in traditionally female fields such as nursing and education, “yet many social science and professional fields have shown substantial gender desegregation and an increasing supply of women for these positions” (Bilen-Green et al., 2008, p.3; Dugger, 2001a). Women have made a noticeable step into leadership positions in higher education, but many more times than not, “it is typically in smaller, less prestigious schools” (Bilen-Green et al., 2008, p.3). Another reason for an increase in women leaders could be because there is an increased presence of women in higher education. Bilen-Green et al., (2008) states:

More recent research reveals increasing prevalence of women throughout the various academic ranks, yet concern that progress is due mainly to greater numbers of women applicants rather than diminishing gender bias. Such disquiet is reinforced by lingering

disparities in salary and especially rank, along with deteriorating working conditions as more women are hired into the growing number of part-time and non-tenure track positions. (p.3)

Even though women's progress has slowed in recent years, when looking longitudinally at institutions of higher learning, the percentage of women presidents has nearly doubled from 10% in 1986 to 23% in 2006 (ACE, 2007). However, among public institutions, the percentage of land-grants with female presidents is less than half of the percentage of non-land-grants that have a woman at the top administrative position (Bilen-Green et al., 2008, p.5). Land-grant institutions continually fall behind their public and private counterparts in the percentage of women who are in tenured faculty positions and have achieved the rank of full professor (Bilen-Green et al., 2008). Although only a handful of land-grant institutions have female presidents, subsequently in these institutions higher percentages of full professors and tenured faculty are women (Bilen-Green et al., 2008). Traditional pathways to leadership roles are also changing for women and men who wish to lead institutions of higher education.

Pathway to Leadership in Higher Education

Historically, the ladder towards academic leadership started with bright, ambitious, senior faculty who began the climb by first serving as a department chair (Estes, 2001). Individuals who found satisfaction at the department chair level would rise upward as opportunities presented themselves (Bisbee, 2007). Over twenty years ago, Twombly (1990) found most academic deans started from a faculty position, but the perceived career move from faculty, to department chair, associate dean, and dean was followed by relatively few individuals. Recently, there has been an even greater change in the career development pathway of administrative leadership (Wolverton & Gmelch, 2002). Bisbee (2007) states:

Career paths to deans have become splintered with only a little more than half of the deans serving as department chairs. This tended to vary by college, with Arts and Graduate School deans following a more traditional path, and professional school deans going directly from faculty to dean. Wolverton and Gmelch (2002) found only 60% of college deans had been department heads and approximately 40% of college deans had been associate deans. (p.78)

In today's market, it is not unusual for a dean to be hired from industry or another non-academic unit within the university such as development or external affairs. However, Sagaria and Dickens (1990) examined position changes for over 1,200 academic and administrative leaders and reported that 60% of academic administrators built their careers from within the institution. In addition, transitioning from one university to the next to achieve advancement in job title is very common among administrative leadership. Most of the faculty participants in Heuer's (2003) survey did agree the learning curve in moving from one university to another was not very steep and a transition usually proved fairly easily done. For administrators who do not come from within the university setting, the ability to successfully transition into their new role may be a bit more difficult. Heuer (2003) found that external candidates from the for-profit world are at a real disadvantage in understanding the culture of higher education and functioning successfully within its norms and values. The demographics of higher education are changing to reveal more diversity in backgrounds of leaders than in years past.

Demographics of Higher Education Leadership

According to the National Center for Education Statistics (2010), 217,000 individuals served in executive/administrative/managerial capacities within all of the degree-granting institutions in the United States in 2007. Of those administrators, 79.9% were White, 9.6%

African American, 4.6% Hispanic, 2.9% Asian/Pacific Islander, and .5% American Indian/Alaska Native. Specifically, in public four-year institutions, there were 81,364 employees considered administrative with men and women comprising almost equally 50% of those positions (National Center for Education Statistics, 2010). The statistics on ethnic breakdown of these same positions at public four-year institutions of higher learning closely mirror the trend across the nation.

Deans and Associate/Assistant Deans in Higher Education

In higher education, a dean is an individual with significant authority over a specific academic unit (e.g., schools and colleges) or particular area of concern (e.g., student affairs or diversity) for the organization. The term dean comes from the Latin word “decanus” which translates to “a leader of ten,” taken from organizing groups of ten monks in medieval monasteries for administrative purposes (Rhodes, 1977). As universities grew out of monastery schools, the title of dean continued to be used for officials with administrative duties. Deans and assistant/associate deans are of particular interest because they have navigated significant barriers to achieve a position of high power and influence within their area (Issac et al., 2009).

Reading job postings for the position of dean gives insight into the duties and responsibilities that the position will entail. The University of Florida recently posted a job announcement for Dean of the College of Agricultural and Life Sciences. The job description stated that the dean will provide leadership for all academic programs, represent the Institute of Food and Agricultural Sciences (IFAS) on all academic matters, serve on the Council of Academic Deans, work closely with IFAS Deans for Research and Extension, serve as a liaison to the College of Veterinary Medicine, provide programmatic leadership to the College for hiring, promotion, and tenure of faculty, oversee budgets, work to increase extramural funding

and endowment gifts, and provide vision and dynamic leadership aligned with the mission of a comprehensive land-grant institution (Chronicle of Higher Education, 2010).

The dean's job description from the University of Florida seems to be very consistent with the picture presented in literature of the requirements of dean. By agreeing to become dean, one is essentially taking on enormous responsibilities often with limited resources, power, and support (Rhodes, 1977). More times than not, the dean can fall under a microscopic lens being watched by many who have a longstanding history with the college and the university community (Rhodes, 1977). The style of leadership that the dean uses to engage the college, paired with effective associate and assistant deans are all a part of the framework for successful leadership.

The roles of associate and assistant deans are mainly to work with the dean to help him/her accomplish the work of the college (Ayers & Doak, 1986). In a survey of 265 colleges of education, job descriptions for assistant/associate deans were analyzed to determine their relationship with the dean of the college. The data found that assistant/associate deans are widely used to assist deans in carrying out their leadership roles. While deans generally retain control of the instructional aspects of their college's program, assistant/associate deans have assumed leadership roles over such support areas as research, student personnel services, and general administration (Ayers & Doak, 1986). Assistant or associate deans are found giving leadership in specific areas of operation for the entire unit.

In collegiate leadership structure, associate deans typically report to the dean while assistant deans typically report to the associate dean or the dean. Both positions are not required to but can have authority over a specific unit of the college (e.g., Associate Dean for Academic Affairs) and in some instances there may be an associate and assistant dean working for the same

purpose. When there is an assistant and an associate dean working in the same area, usually each individual has a specialty that they are bringing to the table. Finance, student recruitment, diversity, and alumni relations seem to be common themes among positions held by associate/assistant dean leadership. Women are most commonly found in the associate or assistant dean roles within the collegiate leadership hierarchy.

Women Deans and Associate/Assistant Deans in Higher Education

Literature on the leadership traits of women deans is sparse as compared with women presidents which is more commonplace. In a recent empirical study, “Women Deans: Leadership Becoming” (Issac et al., 2009), researchers conducted qualitative interviews with 10 female deans across the southeast. Through the data collection, scholars found several themes surrounding the leadership styles and backgrounds of the women. Often the deans rose to high positions early in their careers and practiced building their leadership skills (Issac et al., 2009). “Many of the deans organized others towards a goal to be the best in whatever they were doing and they wanted others to share their visions and goals” (Issac et al., 2009, p.139). A reoccurring theme from the study was that many of the women never explicitly planned to be dean, but they were excelling in their roles and the opportunity just happened upon them (Issac et al., 2009).

This study revealed that while describing their personal leadership style, the women deans used terms that were loaded with feminine discourse. The deans wanted to inspire, illustrate, and illuminate the people around them. “Consensus, cooperation, and collaboration” were terms that described a participatory management style often characteristic of women in leadership roles (Issac et al., 2009, p.143). The women described their leadership experience as trying “to always compensate by being twice as good and hoping to get half the credit” as a man would in their same role (Issac et al., 2009, p.146). Leadership was defined by these women as

getting people to work toward the goals of the organization, but the actual term 'leadership' was loaded with the emotional context of experience. Leadership was not learned through courses, but the mechanisms of society, as well as the identities and intrinsic drives of these individuals (Issac et al., 2009, p.149). In this study, the women referenced relationships, experiences, and ideologies as giving knowledge to their leadership practices.

Research states that continuing barriers for women in higher education administration seem especially pronounced in departments of science and engineering (Etzkowitz, Kumelgor, & Uzzi 2000; Nelson & Rogers 2004), where only 19 % of full professors are women in four-year colleges and universities overall, with even lower representation in research institutions (NSF Science and Engineering Indicators, 2008b). The route to dean or assistant dean most likely begins after one has been a full professor and department chair. Additionally, the female dean percentage is positively correlated with percentages of female full professors, tenured faculty, and tenure-track faculty in a university (Bileen-Green et al., 2008, p.7).

Research shows that when women are in an executive leadership role, there is a higher chance that their organization will have more women in higher management throughout its ranks (Bileen-Green et al., 2008). Not many women want to go where no women are (Konrad et al., 2008) which establishes the grounds for forming a critical mass of women to truly begin to diversify organizational management in higher education. Current empirical literature reveals that more research is needed to inform the understanding of how women deans learn to show leadership while operating within various critical contexts.

Women's Leadership

Studies within the last five years on the lack of women in senior management (Helfat, Harris, & Wolfson, 2007) and the gender pay gap (Blau & Kahn, 2007) indicate that women

continue to be disproportionately underrepresented in top management and are paid less than men are when they do reach those positions (Kochan, 2007). Research on the glass ceiling (Morrison & Von Glinow, 1990) and the glass cliff (Ryan & Haslam, 2005) has received increased scholarly attention in recent years, perhaps due to the continued indicators of inconsistency of gender related issues within the workforce. Deconstructing the barriers to women achieving upper management positions allows researchers to explore the context in which these situations are taking place.

An overwhelming majority of leadership literature also focuses on building individual human capital while ignoring the social identity and social context and/or setting of the leader, which can be problematic, especially for women (Stead & Elliott, 2009). Throughout the years, the women's leadership paradigm has transitioned from identifying social/interpersonal characteristics of women leaders and the barriers they face to a new era of postheroic models that account for leader relationships along with fluidity in the social environment.

Research on the ways that the one learns to become a leader has been relatively sparse (Stead & Elliott, 2009). However, the work of Kempster (2006) begins to examine learning through lived experience. Findings from his study of men in the workplace conclude that formal development interventions had a relatively low level of influence on the leaders that were in his sample population. Highly ranked learning moments were found when men observe other leaders. Socially situating leadership allows us to understand the learning process as a part of the context of the learner and recognize that learning leadership is both a formal and informal process (Fox, 1997; Marsick & Watkins, 1990).

Studies show that leadership for women tends to be more relational in nature and thus these relationships have meaning in the social environment. "Then, understanding how women

leaders experience learning from a situated approach is to recognize that any woman leader's experience cannot be separated from its social context" (Stead & Elliott, 2009, p.136).

Acknowledging that leadership is an informally learned and socially situated process allows for the development of models not only focused on the individual but also the context.

Metaphorical Illustrations for Women in Leadership

The glass ceiling metaphor describes the invisible barriers or deficiencies that women in leadership can face that keep them from attaining their ultimate career goals (Morrison & Von Glinow, 1990). Literature reveals that research on the glass ceiling is focused mostly on the women themselves and the deficiencies that they may have to keep them from attaining a managerial role (e.g., child rearing, lack of education or experience, or desire) (Pichler, Simpson, & Stroh, 2008). Even still, after controlling for these factors, research illuminates that the glass ceiling phenomena still persists (Gray, 1987; Hardin, 1991). Rich pipelines of educated and qualified women have been in the workforce for a number of years, but yet women in management roles across the United States decreased from 18% in 2009 to 15% in 2010; a consistent range since the mid-90s.

Building upon the glass ceiling metaphor, the "glass cliff" (Ryan & Haslam, 2005, p. 81) is a term that became popular in the 2000s to describe women who have made it through the glass ceiling to obtain a position of power, but are set up to fail because of the lack of resources or support from the organization. For example, a new woman employee might not be included in an informal social network comprised of men that share important learning with each other about on-the-job experiences. Women could be situated in a position of power within the organization and not be allowed to exercise that power because of other political or cultural factors.

Discourse among scholarly researchers is now trending towards examining the context in which the glass ceiling effect is taking place. Literature states that silent inhibitors, such as occupational sex stereotyping, often find their way within organizations and can serve as barriers for women looking to advance (Pichler, Simpson, & Stroh, 2008). In a work context, research reveals that the unintentional sex stereotyping of women in different occupations can lead to biased evaluations of women's performance and qualifications (Eagly & Karau, 2002).

The Lack of Fit Model (Heilman, 1983) proposes that when one's gender is incongruent with the sex type of a specific job, sex bias will occur and lead to decreased performance expectations and evaluations (Heilman, 2001). The sex type of a job is determined by two factors: the gendered characteristics believed to be required of that job and the proportion of men (or women) occupying the job (Welle & Heilman, 2005). Research shows that when a woman exhibits mostly feminine behaviors she is perceived as likeable but sometimes inadequate for managerial responsibilities (Pichler, Simpson, & Stroh, 2008). In the same way, if a woman is perceived as masculine, she may be viewed as a better fit for a managerial role, but not as likeable and could become excluded from consideration for the position she desires (Pichler, Simpson, & Stroh, 2008). However, how a woman is perceived can impact the effectiveness of her leadership practices.

Finding a Fit for Women in Leadership Development Literature

"With men viewed as the 'natural inhabitants' of the organizational domain while the women are 'out of place' (Ford, 2006, p.81), perhaps it is not altogether surprising that leadership development largely reflects a gendered stance" (Stead & Elliott, 2009, p.37). For this reason, it can be argued that leadership literature has been historically designed based on masculine models of leadership. However, in recent years, leadership models have been trending

towards a gender-neutral stance with emphasis on the decreasing masculine nature of leadership (Billing & Alvesson, 2000; Stead & Elliott, 2009). Current leadership and organizational development literature is emphasizing the effectiveness of transformational leadership traits versus the transactional traits which are more closely aligned with traditionally masculine styles of leadership.

In today's view, transactional leadership is most closely aligned with management literature on the role of supervision within the organization and group performance. First described by Weber and then further explored by Bass (1985), basic principles of transactional leadership include the assumption that workers perform best when the chain of command is clear. Rewards and punishments are key motivators and that obeying the instructions of the leader should be the primary goal of the follower. In this model, the leader carefully monitors the followers to ensure that goals are met and believes that rules and protocols are essential to the success of the organization. Research supports the notion that transactional leadership is most effective when problems or situations that need to be handled are relatively simple in nature (Bass, 1985). A transactional leadership style maintains the status quo by proving to be reactive to situations instead of proactive. Transactional leadership tends to be situated on the opposite end of the scale to a transformational model in leadership literature.

Transformational leadership is a different model which states that leadership is a process in which leaders and followers help each other to advance to a higher level of morale, motivation and outcome for the organization (Burns, 1978). Transformational leaders have the ability to make employees feel recharged. They have a clear vision and passion for the work at hand. Oftentimes, transformational leaders are focused on producing a high quality process which they feel will lead to a high quality outcome. Empowering employees, fostering innovation, empathy,

and collaborative decision making are traits more closely aligned with transformational leadership styles that tend to reflect a more feminine personality schema.

Literature is supporting the use of transformational leadership traits in management because of the resulting increased effort from employees and productivity within the organization when these strategies are employed (Bass & Avolio, 1994). Essentializing feminine leadership by aligning it with transformational qualities is not fully warranted either; however, recognizing that gender is a factor when creating a model for leadership development is also recognizing the sometimes unspoken but ever present context in which all people lead.

Gender-neutral models of leadership development are problematic due to their lack of recognition of gender as a factor in the social, cultural, and historical background within the organizational context (Stead & Elliott, 2009). Proven barriers that women face while in leadership positions include male stereotyping, preconceptions and exclusion from corporate networks (Burke & Vinnicombe, 2005). Even among women who have climbed to the top of the corporate ladder, many continue to feel that they are “outsiders on the inside” with the self-perception of invisibility within their senior male collegial group (Davies-Netzley, 1998; Stead & Elliott, 2009). Lack of recognition of women and the context in which leadership occurs negates reality and the changing nature of leadership.

In postheroic models, leadership is presented as a process which emerges through relationships and spheres of influence including the broader contextual conceptualizations of fields of practice (Stead & Elliott, 2009). Practice, social process, and learning (Fletcher, 2004) are three key elements which differentiate postheroic models from previously established individualistic models of leadership. Founding principles of this model emphasize that leadership is a shared practice and that each person within the organization has a voice (Stead & Elliott,

2009). These models place an increased emphasis on identifying leadership traits which may be identified as traditionally more feminine characteristics: “empathy, vulnerability, and skills of inquiry and collaboration” which are employed within the larger social context (Stead & Elliott, 2009, p.27).

Perception of Women as Leaders

Cultural stereotypes among other factors have contributed to society’s mixed perception of women in leadership roles. In the United States, and in other countries, boys and men have been found to have a more masculine schema of a leader than do girls and women (Deal & Stevenson, 1998; Schein, 2001; Sczesny, 2003). Research shows that among both undergraduates and actual professionals, men have been found to hold more negative attitudes toward women in management than do women (Eagly & Mladinic, 1994; McGlashen, Wright, & McCormick, 1995; Tomkiewicz, Frankel, Adeyemi-Bello, & Sagan, 2004). Subordinates’ evaluations of women’s leadership performance are significantly more negative to the extent that they hold more negative attitudes toward women in management (McGlashen et al., 1995). Research has also shown that men are more likely than women to view the world in terms of hierarchical relationships. Additionally, those men with a preference for hierarchy are more likely to stereotype women negatively (Schmid Mast, 2005).

Several meta-analyses have demonstrated that women leaders are more likely to be devalued by their male than by their female subordinates (Eagly, Makhijani, & Klonsky, 1992; Eagly, Karau, Makhijani, & Mona, 1995). Robbins-McNeish (2007) argues that the struggles of women come from two sources: having a lower status in society compared to men and the stereotypical belief that women should not have a higher status than men. The author suggest that a male subordinate—who maintains a masculine image of a leader, sees the world in

hierarchical terms, and believes himself to be of higher status than women— may feel that a woman leader does not have the right to question his judgment in his daily work.

On the other hand, women, oftentimes do not hold an image of a leader that is as stereotypically masculine and are less likely to organize social relationships in terms of hierarchy. Because of the relational nature of women, they might consider it appropriate for a woman leader to question her views. Literature supports the notion that our culture does not put masculine leaders in such “no-win situations” as leaders as often can be the case for women.

The double bind is a well-researched metaphor that describes the dilemmas of a woman in leadership. A 2007 Catalyst study found that women executives faced three major double bind dilemmas:

- 1) Extreme Perceptions: Too Soft, Too Tough, and Never Just Right.
- 2) The High Competence Threshold: Women Leaders Face Higher Standards and Lower Rewards than Men Leaders.
- 3) Competent but Disliked: Women Leaders Are Perceived As Competent or Likeable, but Rarely Both. (p.7)

As women are often evaluated against a masculine standard of leadership, they are many times left with unfavorable options of how to respond no matter how they behave as leaders (Catalyst, 2007). Gender stereotypes and all stereotypical perceptions create predicaments for women leaders which often hold unseen barriers to women’s advancement (Catalyst, 2007). Women are often working to find the best balance between likeability and competency in the work environment. Often the workplace culture can be a difficult environment to navigate

Microaggressions in the workplace. Pierce (1972) coined the term microaggressions to describe covert or subtle aggression conducted by a dominant power group or individual towards

an underrepresented group or individual to reinforce the positionality and power that exists within the structure of the group. Found situated in literature in regard to race, the term microaggression is defined as “brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults toward (non-white) people” (Chambers, 2011, p.234). Upon further exploration, Sue (2007) and his colleagues dissect microaggression into a taxonomy of domains: explicit verbal and non-verbal attacks; microinsults, rude or insensitive characterizations of one’s heritage; and microinvalidation, the exclusion and/ or nullification of one’s perspectives on the basis of race. Stemming from work on microaggressions, Rowe (1990) began to discuss the term as it relates to gender discrimination in the workplace. She also coined several other phrases to describe indirect forms of discrimination that have become imbedded into the fabric of workplace cultures. Rowe argued that “subtle discrimination is now the principal scaffolding for segregation in the United States” and that “micro-inequities can occur anytime people are perceived to be different” from the group at-large.

Rowe (1990) discusses that micro-inequities are hard to prove because the slights can seem so culturally normal that they can go unnoticed. For example, a male senior manager fails to speak to female clerical staff making them feel unimportant. It’s the kind of behavior that can cause personal stress to individuals who are more often “less powerful people” (Rowe, 1990, p.11). Examples of this of behavior can seem trivial or even totally survivable to the average white male manager but could absolutely devastate the employees that it effects, having a negative influence on their self-perception and work performance. Due to the lack of women in

leadership positions in higher education, the major numbers of individuals experiencing assaults in the form of microaggressions are women and/or any other individual who is different from the dominant power group.

Theory of Informal and Incidental Learning

In addition to the macro-level Theory of Critical Feminism, the Theory of Informal/Incidental Learning is the micro-level theory informing this study. Adults who work full-time tend to spend a majority of their life in the workplace. During these working hours, adults gain knowledge through formal and informal learning (Marsick, Watkins, Callahan, & Volpe, 2010). The Theory of Informal and Incidental Learning as developed by Marsick and Watkins (1990), defines informal learning by contrasting it with formal learning:

Formal learning is typically institutionally sponsored, classroom-based, and highly structured. Informal learning, a category that includes incidental learning, may occur in institutions, but it is not typically classroom-based or highly structured, and control of learning rests primarily in the hands of the learner. Incidental learning is defined as a byproduct of some other activity, such as task accomplishment, interpersonal interaction, sensing the organizational culture, trial-and-error experimentation, or even formal learning. (p.12)

Informal learning, in many situations, takes place when the learner is involved in circumstances that are not part of the daily routine. As decisions and procedures are exercised that are out of the normal scope of activities, learners may find themselves in circumstances where they have to “re-think situations” and “re-frame their understanding of the kind of learning

that they might need to undertake” (Marsick et al., 2010). Incidental learning can be semi-conscious and accidental while informal learning can possibly be planned or intentional (Marsick et al., 2010).

The benefits of informal and incidental learning are that they are “linked to meaningful job activities” (Marsick et al., 2010). When informal and incidental learning take place, more than likely it is directly linked to a situation that is happening in the immediate work environment of the individual (Marsick et al., 2010). Through conscious “attention, reflection, and direction” incidental and informal learning can become highly valuable to the learner and the organization for which they work (Marsick et al., 2010). Informal/incidental learning is founded deep within the roots of experiential learning and action science.

Foundations of Informal/Incidental Learning Theory

One contribution to the theory of informal and incidental learning is Kolb’s (1984) Theory of Experiential Learning which lays the framework based on the design of the experiential learning activity. The concept of experiential learning stems from Dewey’s notion that “education must be conceived as a continuing reconstruction of experience” (Dewey, 1897, p.79). Dewey’s (1938) pragmatic cycle of problem solving through reflective thought leads us to understand the importance of active reflection on the learning process. Reflective thought begins with a disjuncture between the expected results and what occurs, which can lead to re-thinking the nature of the problem and the directions in which one might look for solutions (Marsick et al., 2010). Kurt Lewin (1947) developed the concept of action research which is also founded in this model of problem definition, data gathering, reflection on evidence, learning, and planning based on what was learned.

Building off of Lewin's work, Chris Argyris and Donald Schon (1974, 1978) developed a systematic theory for learning from experience in groups called action science. In action science, the leader must be open to being transformed through power sharing that enhances a mutual vision from within the group (Torbert, 2004, p.18). This type of mutual power, shared for the greater good, is uncommon and unfamiliar to many who have participated in group dialogue. Bill Torbert (2004) describes action science as a process involving single, double and triple loop learning that requires various stages of reflection, changes in behavior, ways of knowing, and, individual and collective action on behalf of the participant.

From Dewey's idea of disjuncture, Argyris and Schon conceptualized that an error could be a "trigger for learning how to correct a course of action or tactics (single loop learning) to achieve one's goals" (Marsick et al., 2010, p.7). This single loop learning results in a behavior change and modification. If these modifications do not achieve the desired result, double loop learning occurs "in which one examines values, assumptions, and beliefs that influence how a situation or problem is framed" (Marsick et al., 2010, p.7). Double loop feedback requires the leader to change the strategy, structure, or goals of the mission. When one reframes the problem usually a more effective solution occurs in which case the participant(s) must learn how to implement it (Marsick et al., 2010). As the leader experiences the actual change, awareness of transformational learning occurs over four domains of experience resulting in triple loop awareness (Torbert, 2004, p.18).

Triple loop feedback "highlights the present relationship between our effects in the outside world and 1) our action, 2) our strategy, and 3) our attention itself" (Torbert, 2004, p.18). This type of learning occurs in the moment of the here and now. It requires the leader to be present with a keen sense of awareness and discernment. Triple loop learning can be the most

difficult type of learning to experience. The result to the outside world looks like a change in vision, intention, or attention on behalf of the learner (Torbert, 2004, p.19).

Marsick and Watkins (1990) developed the Theory of Informal and Incidental Learning based on the framework of action science. Informal/incidental learning can lead to feedback that will inspire single, double, or triple loop learning. Reflection from within the group utilizing informal/incidental learning experiences can lead to empowering the Theory of Informal and Incidental Learning which has informed empirical analysis but can be problematic to use because of the difficulty to identify a set of defined indicators to measure the depth and scope of the learning that has occurred.

Empirical Studies Utilizing the Theory of Informal/Incidental Learning

Experiential learning is the most prevalent kind of work learning (Livingstone, 2001). It is also the most invisible and least documented within the scholarly community (Livingstone, 2001, p. 16). One of the initial empirical studies to measure the extent of informal learning activities among adults was the 1961-62 national survey of voluntary learning. The findings indicated almost 40 % of adults in the United States reported they had previously participated in some type of experiential learning activities and 10 % reported current participation (Johnstone & Rivera, 1965). Due to the findings, Johnstone and Rivera (1965, p.37) concluded, that “self-instruction is probably the most overlooked avenue of activity in the whole field of adult education.”

Inspired by Malcolm Knowles’ early work on self-directed learning and the findings of Johnstone and Rivera (1965), Allen Tough pioneered a substantial body of empirical research dealing with self-directed and informal learning. “Tough’s early case studies, since corroborated by many others, found that well over two-thirds of most adults’ intentional learning efforts

occurred completely outside institutionalized adult education programs or courses, hence the image of the adult learning iceberg” (Livingstone, 2001, p.7). Patrick Penland (1977) conducted a large-scale national survey focused on informal learning and found that over three quarters of adults in the United States were involved in self-planned learning and were spending an average of 500 hours per year in such informal learning settings.

Another reputable national-level assessment was a “1989 Australian survey, which addressed both formal structured training programs and unstructured training activities” (Livingstone, 2001, p.17). This survey indicated that more than two-thirds of individuals at all levels of formal educational attainment shared that they had engaged in some type of informal job-related learning within the last year. In addition, “several American and Canadian national surveys have found that over 70 % of the job training received by employees is informal” (Livingstone, 2001, p.17; U.S. Department of Labor 1996; Ekos Research Associates, 1993). These studies suggest that informal/incidental learning occurs throughout a person’s lived experience, but especially at work, resulting in a majority of the way that individuals learn to do their jobs. In recent years, informal/incidental learning has emerged as a key factor to study in policy forums surrounding human resource and organizational development.

Issues and Trends in Informal/Incidental Learning

Over the past 30 years the “public policy debate on lifelong learning has moved from a unilateral focus on institutionalized education that learning is ‘lifewide,’ taking place at work and elsewhere” (Cheallaigh, 2001; Skule, 2004, p.7). Employees who have coupled formal education and training, with informal learning are viewed as the “key to corporate competitiveness,” and (informal learning) “is thus recognized as a major target area for companies’ human resource policies and also for social partner policy and intervention” (Skule,

2004, p.8). In his article, “Learning Conditions at Work: A Framework to Understand and Assess Informal Learning in the Workplace” Skule (2004) wrote:

The policy engagement with informal learning is instigated by research, which increasingly substantiates the claim that informal learning constitutes the most important way of acquiring and developing the skills and competencies required at work (Ashton, 1998; Boud & Garrick, 1999; Skule, Stuart & Nyen, 2002; Skule & Reichborn, 2002; Zambarloukos & Constantelou, 2002). The findings of Eraut et al., (1998) are indicative of this emerging understanding. Their broad qualitative study of learning in engineering, business, and healthcare enterprises concluded that ‘learning from other people and the challenge of work itself proved to be the most important dimensions of learning for the people we interviewed. Although some reported significant learning from formal education and training, this was by no means universal, and often only of secondary importance’ (Eraut et al., 1998). (p.9)

Skule (2004) postulated that the difficulty in measuring informal/incidental learning within a set of defined indicators results from current inadequacies in theories of workplace learning. Even so, a number of factors have been identified “as conducive to informal learning” in the contexts examined (Skule, 2004, p.10). Examples are:

- Sufficient task variation in the job, participation in temporary groups, opportunities to consult experts inside and outside the workplace, changes in duties and work roles that stimulate learning (Eraut et al., 2000)
- Work roles that allow for peripheral participation in communities of practice (Lave & Wenger, 1991), and facilitation of informal communication, problem solving and innovation within such communities (Brown & Duguid, 1991)

- Structures and incentives for knowledge sharing, job mobility, autonomous jobs (Marsick & Watkins, 1999).

The above examples were found in mostly qualitative studies and are specific to the context in which they were found. In order to develop a more comparative comprehensive framework, Skule (2004) used qualitative and quantitative methods to measure the “learning intensity of jobs” by assessing the characteristics of each position and categorizing them into “learning intensive jobs” and “learning deprived jobs” where either intensive or limited informal learning occurs (Skule, 2004, p.11). The findings revealed “education is an important pathway to learning intensive jobs” (Skule, 2004, p.11). “Among women with compulsory school education only, a meager 14% had learning intensive jobs, while 55% were in learning deprived jobs. For all levels of education, men had more learning intensive jobs than women” (Skule, 2004, p.12). For women with a higher university education, over 30% were in jobs labeled learning intensive (Skule, 2004).

In 1998, the research network on New Approaches to Lifelong Learning conducted the first national survey in Canada which focused on adults’ informal learning practices (Livingstone, 1999). This study also revealed that adults who were more highly educated were much more likely to take part in “further education courses or workshops and also to plan to participate in courses in the future” (Livingstone, 1999, p.15).

With the creation of the web and integration of social media technologies into our everyday lives, the notion of informal learning is expanding. Jay Cross (2007), author of *Informal Learning: Rediscovering the Natural Pathways That Inspire Innovation and Performance*, challenges corporations to teach employees in the more natural ways in which people learn (Mishra, Laff, Jarventaus, & Ketter, 2007). Cross (2007) writes that social

networks are vital to informal learning and that the most powerful instructional technology ever created is human conversation. Informal learning is perhaps the most powerful way that we learn everything from our language, to our culture, to our interpersonal communication style, to how we react in certain situations (Cross, 2007). In many circumstances, what has been modeled for us at work, or at home, or in our circles of friends can determine our responses.

Research continues to emerge recognizing informal learning as at least 80% of how employees learn their jobs. Scholars are continuing to define measures of informal learning and organizations are wondering how to put systems in place to maximize the ability of employees to interact with each other in order to increase profits (Mishra et al., 2007). Cross suggests that companies should “invest in their mature workers in self-directed informal learning” (Mishra et al., 2007, p.99). Cross recommends making time for informal learning, setting up space for it to occur, and utilizing technology to make collaboration easier (Mishra et al., 2007). The experiences of women as subjects of informal/incidental learning have not garnered much attention, specifically in the field of higher education. As we analyze the informal/incidental learning of workers within the organization, we should also organize efforts to research specific applications for women in leadership roles.

Relationship of Informal/Incidental Learning to Women Deans of Agriculture

Even though the Theory of Informal/Incidental Learning has been empirically studied across a broad spectrum of workplace environments, the literature does not begin to address the specifics of women’s informal/incidental learning as it relates to leadership, especially within higher education. Before entering into the role of dean, many times women have had different developmental experiences in their personal and professional lives than men, and these experiences have helped prepare women to take on leadership roles in the workplace (Bierema,

2001; Gallos, 1989). Traditionally, women enter the workforce in jobs that are sex stereotyped for women (e.g., teacher, nurse, administrative assistant) (Domenico & Jones, 2006; Tinklin, Croxford, Ducklin, & Frame, 2005). Women who are serving as dean in a male-dominated field such as agriculture have naturally had informal/incidental learning experiences that have influenced their current leadership practices.

The women who are serving in these roles are an anomaly as men faculty are five times more likely to eventually hold the post of dean as compared to women. The literature reveals continuing barriers for women in higher education administration which seem especially pronounced in departments of science and engineering (Etzkowitz, Kumelgor, & Uzzi 2000; Nelson & Rogers 2004), where only 19% of full professors are women in four-year colleges and universities overall, with even lower representation in research institutions (NSF Science and Engineering Indicators, 2008b).

As previously stated in the literature, informal/incidental learning occurs in the workplace environment and can play a large role in how individuals learn to operate in their jobs (Eraut et al., 1998; Marsick et al., 2010; Tough, 1971/78). Empirical studies show that increased formal education levels have also been linked to the notion of measurable increased informal learning in adulthood (Livingstone, 1999). Women with advanced degrees also show a higher frequency of learning intensity in their jobs (Skule, 2004). Introducing the concept of social networks as an influence on informal learning (Cross, 2007), allows dialogue centered on where women are learning and about their ability to make connections with individuals in the social network that is most beneficial to their success in the workplace (Bierema, 2005). However, the literature does not begin to address informal/incidental learning in the work context of higher education or more specifically with women deans. This study will illuminate women's informal/incidental learning

through critical incidents that have affected their leadership in the higher education workplace. Traditional literature on women at work can inform the knowledge base surrounding women in the higher education workplace as well.

Chapter Summary

Through the lens of critical feminism, this study will explore the informal/incidental learning of women deans and associate deans in colleges of agriculture. Even as women are climbing the ranks of corporate leadership and entering into upper level roles in higher education, the frequency of those occurrences has seemingly hit a stagnant plateau. Studies show that the pipeline is rich with highly qualified women. Yet, many women face barriers in attaining leadership positions, and once they have achieved a leadership role they then often face additional barriers in executing their leadership role.

Works authored by organizations such as Catalyst, among other research literature, suggest that women can often become stuck in a double bind when executing their personal leadership style. Viewed as too tough, or too nice, and never just right, (Catalyst, 2007) women serving in leadership roles often struggle by feeling like outsiders even when they have authority and/or power. In the patriarchal culture of higher education within land-grant institutions, women are serving as chief academic officers in very low numbers. Within colleges of agriculture women are found in the position of associate or assistant dean, but rarely are selected as dean of the college.

How have the women administrators in these roles developed leadership through informal/incidental learning? The Theory of Informal/Incidental Learning and has been lightly researched as it relates to women's leadership development. Observation, modeling, and critical incidents may be just some of the sites where informal learning takes place. While informal

learning is difficult to measure, it can prove to be a powerful tool to capture women's leadership development which necessitates this study. Innovative research and postheroic models suggest that leaders cannot be analyzed independently from the context in which they operate. Literature also suggests that a greater emphasis needs to be placed on researching informal leadership development for women, hence the importance of this study. Beginning to understand how women in leadership learn informally/incidentally through critical incidents will allow scholars to gain insight into women's views and practices of leadership and the contexts in which they operate.

CHAPTER 3

METHODOLOGY

Examining the data through a critical feminist lens, this study analyzed interviews with a comprehensive sample of women in agricultural leadership positions, specifically deans and vice presidents, at land-grant institutions of higher education. The purpose of this study was to determine what incidental/informal learning experiences occurred as a result of a critical incident(s) that inform the leadership views and practices of women deans of colleges of agriculture or institutional vice presidents with agricultural governance responsibilities.

Fundamental questions guiding this study were:

1. What common critical incidents inform the practice of women deans and vice presidents in the male-dominated field of agriculture?
2. How do informal learning and incidental learning shape the practices of women deans and vice presidents in the male-dominated field of agriculture?

This chapter describes the methodology that was used to analyze these research questions as laid out in the following sections: design of study, sample selection, data collection methods, data analysis methods, trustworthiness, reflexivity statement, and chapter summary.

Design of the Study

This study was a critical inquiry into the informal/incidental learning of women agricultural deans and vice presidents seeking to understand their learning through critical incidents. Quantitative and qualitative data collection methods offer different types of

assumptions, purposes, approaches, and researcher roles (Glesne, 2006). A qualitative approach was used in this study to capture narratives of the women's lived experience.

Qualitative Inquiry

Due to the in-depth data being sought through this research, qualitative methods were considered most appropriate. Merriam and Associates (2002) state that "qualitative research is a powerful tool for learning more about our lives and the sociohistorical context in which we live" (p. xv). Qualitative researchers "seek to understand and interpret how the various participants in a social setting construct the world around them" (Glesne, 2006, p.4). Due to the fact that women agricultural deans have never been studied and descriptive data is sought after to inform the research questions, qualitative data collection with focused interview methodology was the most appropriate tool for this study.

Qualitative inquiry requires the researcher to become a main research instrument as he/she observes, asks questions, interacts, and collects data from study participants (Glesne, 2006). Qualitative researchers use three main methods to capture data: 1) in-depth, open ended interviews; 2) direct observations; and 3) written documents (Patton, 2002). The methods of interview and then to a lesser extent observation and document analysis were employed in this study. Interviews allow the researcher to collect direct quotes from the subject that reflect personal feelings about their experiences, beliefs, and understandings (Patton, 2002).

Interview Method

In an interview situation, both the narrator and researcher can be caught in a crossroads of interaction. "Taping a woman's words, asking appropriate questions, laughing at the right moment, displaying empathy—these are not enough" (Anderson & Jack, 1991, p.9). Each interview is a linguistic, social, and psychological event (Anderson & Jack, 1991; Glesne, 2006).

Every experience can be different depending on the contextual factors that come into play.

Interviewing each woman is an opportunity for them to share their personal story, and thoughts or feelings that can inform our understanding of their lives (Gluck & Patai, 1991; Kitzinger & Wilkinson, 1996). There are many fallacies that could occur throughout the interview process, affecting data collection (Cotterill, 1992; Glesne, 2006). In contrast, interviewing when engaged in thoughtfully by both parties can have the opportunity to provide thick, rich data to inform discourse and dialogue surrounding women's issues and the world in which they live.

Dynamics and Concerns of Women Interviewing Women. In the interview, language is a main tool used to relay messages portrayed by the narrator and received by the researcher. Scholars have drawn attention to the fact that language is androcentric (Spender, 1980). Understanding that language is a form of expression, during verbal communication there can be hidden aspects of women's lives that are often ignored (Cotterill, 1992). Women often feel guilty for sharing personal feelings that are inconsistent with that of men and therefore are reluctant to share those thoughts (Anderson & Jack, 1991). Women tend to use language to establish relationships and understand other women which can lead to a sense of natural collegiality in an interview situation when both researcher and narrator are female (Minister, 1991).

Feminism has placed a major commitment on creating a theory and method which centers on "women's perspectives and experiences so that they can understand themselves in a social world" (Cotterill, 1992, p. 594). "The method advocated by many feminists writers as fundamental to producing a sociology for women, is identified as a participatory model" (Cotterill, 1992, p. 594). The participatory model is a natural one for women to utilize due to their interactive communication style that seeks to understand the speaker and create a sense of

equality with them (Minister, 1991). Women are invited to share more of themselves and to engage with the researcher in a form of discovery of self. The participatory model aims to produce “non-hierarchical, non-manipulative research relationships which have the potential to overcome the separation between researcher and the researched” (Cotterill, 1992, p. 594). Through this style women feel very open to sharing their personal or political thoughts with the researcher (Oakley, 1981).

In addition to forming a friendship through a participatory model of interaction, as the researcher, there are other pitfalls that may occur throughout the interview process. One of these issues for women is not fully listening to what the narrator is communicating. Effective listening is perhaps one of the most essential skills to interviewing but can be a very difficult skill set to master. There are a number of recommendations found in literature to understand how to master the listening process (Anderson & Jack, 1991; Glesne, 2006). Listening to the narrator’s moral language, examining the logic of the narrative story, and picking up on meta-statements brings the woman’s commonplace story into focus for the researcher (Anderson & Jack, 1991).

Moral self-evaluative statements allow the researcher to examine the relationship between the narrator’s self-concept and actual behavior compared to cultural norms (Anderson & Jack, 1991). How the narrator feels or acts when she does not meet societal expectations is another indicator of self-concept and perspective (Anderson & Jack, 1991). Additionally, analyzing the logic of the narrative story, allows the researcher to follow the thought pattern of the woman’s consistency in statements, reoccurring themes, and the way that these themes interact with each other (Anderson & Jack, 1991). Insights into women’s ways of knowing and interpreting the world can allow the researcher to understand the woman’s voice and relate it to different contexts (e.g. social, historical, political, post-modern) (Anderson & Jack, 1991).

Meta-statements “alert us to the individual’s awareness of a discrepancy within the self—or between what is expected and what is being said” (Anderson & Jack, 1991). These types of statements are usually found when the interviewee stops impulsively, reflects, and then comments about their own thoughts or something that they just said (Anderson & Jack, 1991, p. 21). In this way, the researcher can have an insight into the personal ideologies of the woman and can determine more closely what is informing their thoughts and how they socialize their feelings according to certain norms (Anderson & Jack, 1991).

As the researcher, it is also important to listen to oneself and avoid the natural tendencies of regular learned conversation (Anderson & Jack, 1991; Glesne, 2006). A level of trust should be established through building rapport and opening questions that allow the narrator to feel comfortable enough to open up with her words (Glesne, 2006, p.84). Interviewing and conversation are similar in that the narrator should feel comfortable allowing an ebb and flow to be established. However, the interviewer must continually stay in tune and focus on the woman sharing her perspective. Using the participants’ own words as data provides personalized detail and rich imagery that give insight to the informal/incidental learning of the women administrators.

Sample Selection

Qualitative inquiry typically focuses on an in-depth sample that is relatively small and selected purposefully in contrast to a quantitative sample that is usually a larger sample selected randomly (Patton, 2002). In many cases, qualitative inquiry uses purposeful sampling techniques to learn a great deal of information about an issue of importance to the study. By choosing research subjects who fit a specific typography the data set illuminates in-depth

findings about the individuals in the sample population. In contrast, quantitative sampling might include a large data set that could be used for empirical generalizations.

The criterion for the sample is female deans of colleges of agriculture and vice presidents with agricultural governance responsibilities located within land-grant institutions in the United States. Throughout the nation, there are approximately 107 land-grant institutions of higher education with colleges of agriculture in each one. Seven women were identified through research to hold the position of dean of the college of agriculture at land-grant institutions with an additional three women in interim roles. There were three women who were considered vice president of their university and who had agricultural governance responsibilities including experiment stations, cooperative extension, etc. These women were the target sample population for this study and serve as the chief academic officer of their college or vice president of their institution. In many instances these women were the first of their gender to hold these types of leadership roles.

The target goal of this study was to reach saturation for the sample. Glesne (2006) recommends a sample size of seven to ten participants for an effective interview study. Because of the low number of women in the position of dean and vice president, this target sample was comprehensive. From my research, there have been no studies specifically conducted on women in agricultural leadership positions within corporations or public service roles justifying the need to research this population.

The selection of colleges of agriculture within land-grant institutions was chosen because of the longevity of their existence, being historically the oldest and traditionally male led schools, within the public higher education system. Colleges of agriculture were established across the nation with the passing of The Morrill Act of 1862 which was created in response to a

nation's cry for advanced education applicable to meet the needs of a broad citizenry (National Association of State Universities and Land-Grant Colleges, 1995). Signed into law by President Abraham Lincoln, land-grant institutions were established with the mission to "teach agriculture, military tactics, and the mechanic arts as well as classical studies so that members of the working classes could obtain a liberal, practical education" (National Association of State Universities and Land-Grant Colleges, 1995, p.3).

Data Collection Methods

For this study, oral interviews supported to a lesser extent by document analysis and observation was the best method to capture the informal and incidental learning through critical incidents of the women deans and vice presidents.

Critical Incident Technique

This study used critical incident technique (CIT) as a method of data collection as developed by Flanagan (1954). Historically, CIT utilized empirical data collection to document critical incidents for job analysis. Created for World War II pilots, CIT has a five step technique: creating a general statement of aims/objectives, outlining specific plans regarding data collection, collecting data, analyzing data, interpreting, and reporting the findings. An incident is defined as an observable activity that is complete enough to permit inferences and predictions about the person performing the act (Flanagan, 1954). When CIT is used for qualitative analysis such as in this study, participants are asked to determine which incidents are critical.

The strength of critical incident methodology is that it solicits thick, information-rich data. Participants can share a number of critical incidents during an hour-long interview which is helpful when studying an undocumented area such as women administrators in agriculture. Corbally (1956) notes that recommendations can be utilized by practioners immediately upon

receipt of the data. Listening to an experience from the participants' perspective can prove to be a more vivid lens than those of experts (Gremier, 2004). CIT is also noted to be successful across a variety of disciplines and fields of study.

Interviews

Oral interviews are a useful tool to generate “new insights about women’s experiences of themselves in their worlds” (Anderson & Jack, 1991, p.11). Unlike other methods, the face-to-face interview allows the researcher and narrator to gain the opportunity to interact and explore different caverns of emotion (Gluck & Patai, 1991). Historically, anthropologists have observed that many times in an interview situation women tend to mute their own perspectives, especially when their interests and experiences are different than those of men (Anderson & Jack, 1991). “To hear women’s perspectives accurately, we have to learn to listen in stereo, receiving both the dominant and muted channels clearly and tuning into them carefully to understand the relationship between them” (Anderson & Jack, 1991, p.11).

Spending time with the women in an interview setting allowed me to gain a greater understanding of the informal/incidental learning that occurred in the workplace. Through utilizing a semi-structured interview format (Patton, 2002), I asked open-ended questions and used follow-up questions to probe in order to elicit greater responses from the participants. Just as each woman is different, so are her critical incidents and the opportunity to explore different facets of knowing and comprehension during and after the situation. I understand that flexibility in design and protocol was necessary and anticipated changes due to factors such as time constraints, participant apprehension, uncertainty, or lack of understanding (Kvale, 1996).

The interview format was simple and straight forward with leading questions about the background and educational experiences of the women. Then, the questions were more specific,

asking the women to describe a critical incident that occurred during their career. Then the women laid the foundation of events that happened before the incident, during the incident, and then after the incident. Then, I asked the women to describe what they learned. After the incidents were shared, next, I asked the women about their plans for the future and if this learning had impacted their current leadership practices. Below is a sample interview guide:

Table 1

Sample Interview Guide

-
1. Tell me about yourself?
 2. How did you come to the decision to pursue your career?
 3. Take me back to a critical incident in your career. Please describe the incident fully (before, during, after the event). What did you learn?
 4. Can you tell me about another critical incident in your career? Please describe the incident fully (before, during, after the event). What did you learn from it?
 5. Can you tell me about another critical incident in your career? Please describe the incident fully (before, during, after the event). What did you learn from it?
 6. Are there any other ways that your leadership style has been influenced in a non-formal way? What did you learn?
 7. How has this learning impacted your leadership?
 8. What does the future hold for you?
 9. Is there anything else you would like to share?
-

Question and Answer in Women's Interviews

The background of the interviewer and their interpersonal communication skills can play a leading role in the ability of the narrator to discuss issues beyond acceptable conversation that could disclose insight into the woman's ontology (Anderson & Jack, 1991; Glesne, 2006). As conversational as an interview may feel, the researcher must continually be keenly aware of the spontaneity of the interview process and the opportunity to extract new insights as dialogue develops. Qualitative interviewing is a fluid exchange, exploring information that is "unavailable in written text—the pauses, the laughter – all invite us to investigate their meaning for the narrator" (Anderson & Jack, 1991, p.23). Even so, when complicated feelings arise on

behalf of the narrator, the researcher does not have to evade into secret space, but could offer a mere suggestion to put a certain thought into perspective (Anderson & Jack, 1991; Glesne, 2006). During the interview process it is up to the researcher to listen and ask appropriate follow-up questions. As the narrator speaks, the researcher picks up on verbal and nonverbal cues and continues asking questions to follow up on specific words, pauses, or thoughts (Anderson & Jack, 1991; Glesne, 2006).

Developing questions to use during the interview is essential to giving the researcher a clear plan of action and understanding with the freedom to deviate from that plan if a different psychological order arises from the respondent's answer (Glesne, 2006). Patton (2002) describes different types of questions that include: experience/behavior questions, opinion/values questions, feeling questions, knowledge questions, sensory questions, or background/demographic questions. In order to establish rapport and common ground, experience/behavior questions are generally a considerate place to begin the interview process (Patton, 2002). In contrast, knowledge questions tend to give the impression that the narrator is being tested and can cause her to withdraw or become uneasy (Patton, 2002). Word choice, voice, and degrees of directness in question phrasing are imperative to the continuing fluidity of the interview process and garnering an introspective response (Glesne, 2006; Tang, 2002).

Documents

The next form of supporting data I planned to collect were documents to gain a broader understanding of the context and culture of the colleges of agriculture where the deans and vice presidents serve. Documents "can be written, oral, visual (such as photographs), or cultural artifacts" (Merriam & Associates, 2002, p. 13). Altheide (1996) defined documents as "any symbolic representation that can be recorded or retrieved for analysis" (p.2). These materials are

important identifiers that give depth and insight into data analysis. Patton (2002) suggests the notion that collecting documents can stimulate new avenues of inquiry that can be pursued through observation and interview.

Subsequently, before the interviews, I asked the women to provide their curriculum vitae for review as well as any other documents that they felt relevant to be studied about them. I reviewed the vitae before the interviews in order to prepare for the time spent together. Additionally, after the interviews, I printed off pages from the college web sites as well as picked up annual reports or publications from the college's front office.

In reviewing the documents, I speculated that these women were highly accomplished and that their vitae reflected a successful career in research and/or teaching before entering into an administrative role. These women have served in four to five positions before becoming an associate/assistant dean and then have three to five years of service before becoming a dean or vice president. Their resumes showed evidence of numerous published academic papers, presentations, and also leadership within scholarly conferences.

Field Notes

Merriam (1998) describes observation as more than just watching what is happening in the social and cultural environment. Observation involves a keen sense of awareness of: the physical setting, participants, activities and interactions, conversations, subtle factors such as nonverbal and informal interactions, and the observers own behavior. "Scientific inquiry using observational methods requires disciplined training and rigorous preparation" (Patton, 2002, p.260). Realizing that our natural tendencies to observe are based on the lens in which we view the world, collecting field notes must be an intentional strategic piece of data collection.

Utilizing Patton's (2002) work "Qualitative Research & Evaluation Methods," I constructed a strategy on field note collection and analysis based on his recommendations for each data collection. The participants were overtly observed and might have shown more sensitivity towards the research process because of their scholarly backgrounds. Field notes were used as a data collection method. Overt observations usually do not produce the same results as covert observations, but still lend themselves to collecting valuable data about the women (Patton, 2002). The environment itself has social and cultural norms that affect the people that operate within its structure that are too vast to capture during this limited approach. However, observing the women's behavior before, during, and after the interview provided valuable data that aids in the understanding of how the leader interacts within her environment.

Field notes were utilized as the mode to record the actions, setting, physical attributes, etc... of the administrator in her environment. I took notes about the nature of the participant's office recording information such as: displayed awards and certificates, books and references available, mac or pc user, and attentiveness to others. The observation paired with the interview allowed me to gain greater insight into the each administrator's personal leadership style and the way that she operated on a day to day basis in her environment.

Data Collection Plan

Gaining access to the women in the sample or the woman who would serve as the "source" was an integral part in generating the ability to conduct this research. Utilizing contacts from working in a previous position within Cooperative Extension, I reached out to individuals within colleges who knew these women. Specifically, I talked with an agricultural dean that I have a good working relationship with to ask if he could make an initial introduction to one of the women. Through this newly formed social network and introduction, I gained access to a

dean who was the “source” and “key witness” of the study sample. The key witness was the crucial beginning point to gain information from this sample population. The woman who served as the “source” had the power and influence to assist in gaining access to the remainder of the interview sample.

Upon initial contact, I thanked the administrator for their time and asked if they would be willing to participate in an hour-long interview for my dissertation research on the informal/incidental learning of women deans and vice presidents. As each leader agreed I worked to schedule an interview time with her executive assistant. Once I made initial contact with all of the women and had identified that all the women would be the sample population, I scheduled interview dates in order to most effectively organize the travel to each site.

Meeting the women in their offices, or the location that they suggested to interview, allowed them to be in surroundings where they felt their most comfortable. Optimally, asking the women to plan for an hour and a half slot will give enough time for introductions to be made and last minute business to be handled before the hour-long interview began. Also, when walking into the building, I began recording field notes. Brief observations included the physical surroundings, workplace culture, attire, and actions of the women as well as those who work with them.

At the beginning of the session, I went over the consent form with the dean and asked if it was okay to record our talk with a Sony digital recording device and back-up tape recording device. After the consent form is signed, I turned on the recorders and began the interview process. During the interview itself, the women were asked about their background and interest in agricultural work. Additionally, I asked the women to talk about a critical incident that happened to them in the workplace where some type of informal learning took place that

impacted their leadership. I asked the women to describe the event in detail. First, the women were asked to begin by laying the foundation for what took place before the event. Then, the women described the actual event and what took place after the event. Additionally, if there was enough time I asked the women to share another event. Lastly, I asked the women how they planned to lead in the future and if they had future career goals.

Data Analysis Methods

A critical feminist paradigm critiques the historical and structural conditions of oppression, which seeks transformation of those conditions, and is often used as the lens to analyze data in interviews where women interview women. Rich data produced through qualitative research needs to be analyzed in a strategic and logical fashion (Miles & Huberman, 1984). Utilizing the constant comparative method, the analysis took place concurrently with data collection (Glaser & Strauss, 1967). This study was approved by the Institutional Review Board at the University of Georgia.

Constant Comparative Method

Miles and Huberman (1984) give nebulous warning advice to the “beginning researcher” in their book “Qualitative Data Analysis.” “The biggest enemy of your learning is the gnawing worry that you’re not doing it right (Miles & Huberman, 1984, p. 14). The constant comparative method was designed with the novice researcher in mind. The steps include:

- 1) Begin collecting data; 2) look for key issues, recurrent events, or activities in the data that become categories of focus; 3) collect data that provides incidents of the categories of focus; 4) write about the categories being explored; 5) work with the data to discover the basic social processes and relationships; and 6) engage in sampling, coding, and writing as the analysis focuses of the key categories (Glaser, 1978).

Phenomena are recorded, classified, and compared across categories. Throughout data collection the process goes through constant refinement following the collection and analysis of data. The process continually feeds back into itself with each data collection.

To begin the analysis process, I transcribed the interviews of each woman. In order to type a script from each interview, I utilized a free web-based program that stored each interview as an audio file on my computer and enabled a slow playback. The Microsoft Word processing program allowed for an easy set-up of the transcript document. First, I started by turning on the auto number feature that numbered each of the lines typed on the page. Then, I transcribed each interview from the very beginning. I consistently finished each interview before beginning another one so as to complete the data collection process for each participant.

After each interview was transcribed, I sent a copy back to each participant for a member check (Glesne, 2006). Once final approval was given by the women, formal data analysis was ready to begin. I analyzed the data and placed words and phrases categorically by themes. Using an excel spreadsheet, I placed words and phrases horizontally and vertically to find patterns. As each interview took place, I continued to add the words and phrases color coding by participant.

Below is a sample of the excel spreadsheet where I began the coding process. By listing an excerpt that captured the essence of the critical incidents that the women shared I created one column of critical incident codes for RQ1. Then underneath that column, I created a listing of codes for RQ2. Because each incident and learning could have multiple codes to capture the essence of its meaning, there were approximately 100 codes developed to succinctly capture the critical incidents and the learning of the women.

Table 2

Excerpts from Critical Incident Coding

"...the previous dean. He was a mentor and friend."

"...Dean of the College of Ag called me and asked me if I would be interested in the role of interim dean..."

"I will not tell you that" (doing what is right)

"...it's because you are a woman" (tokenism)

"My name is not Barbie..."

In order to breakdown the critical incidents into themes, I began searching for meanings within each coded excerpt from the critical incidents and placing them with others that had similar meanings. Each interviewee mentioned three critical incidents and some of the incidents had multiple essences depending on the type of story told. In some instances several of the themes were reinforced by one incident that had multiple dimensions. The following table displays an excerpt from a grouping that became a theme and finding of this research study.

Table 3

Excerpts from Theme Grouping – Developing Leadership Through Sponsorship

"The former Dean" (mentored)

"I felt his support" (President)

"...president saw potential in me" (when I was a senior faculty)

"...the previous dean. He was a mentor and friend."

"...also brought me into close contact with the senior leadership at the university"

(expanding network through leadership)

As subsequent interviews took place, the questions did not change because of the nature of the interview, but I made sure to learn from previous interactions and adapt to situations in the moment. As answers were shared, I worked to record field notes observing the administrator's body language during their response. During the data analysis, I recorded body language along with the answer given. In concert with the verbal interview, field notes and observations helped add depth to the data.

General field notes about the experiences and observations of the women were listed on a separate excel file and color-coded based on the participant. Listed throughout were different themes, such as: office motif, personal appearance, and employee interaction that allowed for added value to the data. Even brief observation can lend itself to be an insightful tool.

Documents such as the curriculum vitae of the deans and vice presidents were printed and compared to measure similarities and differences. Hometowns, education received, colleges attended, papers written, and leadership roles achieved provided very interesting data sets. Research of this nature for women agricultural administrators has never previously been conducted; hence findings from documents would be insightful and further help illuminate the workplace lives of these women.

Data Storage

Electronic files of each interview were stored on my personal laptop computer which was password protected. There were pseudonyms assigned to each of the participating women and all their files were kept under those names. As the women's curriculum vitae were collected, the same pseudonyms were assigned to each document. Files were backed up through a personal external hard drive that was also password protected. Precautions were taken to ensure that the safety of the data was upheld.

Trustworthiness

In this qualitative research study, text in the form of interview transcriptions was the main object of analysis. As the study was being conducted, it was imperative to consider issues of internal and external validity.

Internal validity asks researchers if what they are observing or measuring is really what is being observed or measured (Merriam & Simpson, 2000). Simply stated the researcher needs to determine if the findings compliment the expressed participant understanding of the phenomena being studied. Internal validity was ensured by sending transcribed interviews back to participants for member checks. I asked members to review their statements for clarity and accuracy. Also, through triangulation by using document analysis and observation, the data will have a greater depth of perspective. Holloway and Jefferson (2000) suggest four core questions that are essential to ask as researchers work with their data. Each question is linked to the trustworthiness of the analytical interpretation:

1. What do you notice?
2. Why do you notice what you notice?
3. How can you interpret what you notice?
4. How can you know that your interpretation is the 'right' one? (p.55)

External validity refers to the ability to transfer findings to other studies. In this case, studies on women agricultural vice presidents and deans of colleges of agriculture have never been conducted. This knowledge base is limited and the study will be the first of its kind. In relation to women deans and vice presidents, this study will allow readers an insight into the informal/incidental learning of the women administrators which are serving in a traditionally

male-dominated discipline. As readers review the information collected, they will have the opportunity to decide for themselves how this research adds value to their inquiry.

In qualitative work, findings are rarely suited to be generalized across a spectrum of participants or a specific group because of the nature of the in-depth inquiry among a targeted sample population. Through clear, consistent, and calculated data analysis methods, the data for this study was reliable for the select sample population. I worked to increase reliability through utilizing a descriptive and thoughtful methodological approach approved by my doctoral committee and stating my own personal reflexivity.

Throughout the process of research and data collection, I was as conscientious as possible to keep the content of the interviews in a safe and secure place during and after the study. My personal laptop was password protected and all electronic communication and data files were stored and backed up with my personal external hard drive. After the data was transferred, it was erased from the digital recorder and stored under a password protected file on my personal computer.

Field notes and hand-written notes from the interviews were kept in a secure, locked filing cabinet at our home. As I wrote down any other notes or reflected on the process, I was sure to keep those documents in the locked filing cabinet as well. Additionally, other documents from the universities that were visited, personal vitae of the women, and handwritten correspondence were stored in the same locked cabinet space.

Recollections of the interactions with the deans and vice presidents before, during, and after their interviews were kept confidential. The women, as with any research subjects, trust the researcher to keep their thoughts and feelings private. Conversations with these women were kept confidential and I respect their privacy by making a commitment not to share any names or

associate any person with any data that was found during the study. I understand that in order to earn and keep credibility as a researcher, trustworthiness and maintaining confidentiality is essential.

Reflexivity Statement

As a researcher, I acknowledge that I entered into this research project with a particular way of knowing the world which could lead to some form of bias and assumptions. Born in a rural town in middle Georgia, I was raised being exposed to the discipline of agriculture from an early age. I have always had an appreciation for the work that is done to teach others about agriculture. By participating in the 4-H club from the 5th grade through my college years and also majoring in Agricultural Communications, I have explored my high regard for this discipline for much of my life.

Employed previously at a college of agriculture, I have experienced working with phenomenal faculty of both genders. Serving in the role of researcher allowed me to understand in greater detail the work that the administrators at each college are doing during the data collection and analysis process. I also acknowledge that I may have preconceived notions or ideas of how colleges of agriculture operate, based on my experiences as a student and past employee. I feel that these previous understandings allow for an enhanced foundation on which to begin the research process.

Thoughtful interviews showcased the professionalism and success of the women in administrative roles and revealed critical incidents coupled with moments of incidental/informal learning. However, I understand the sensitivity of this information and recognize that some women who are currently in administrative positions may not be able to share certain incidents for researchers within this study. With this stated I also recognize that administrators may not

share some information for fear of mis-representation of themselves or of others involved within a situation. I plan to build rapport with the women and be very thoughtful in the member check process to assure that each woman feels as if her unique experience has been captured accurately in the data.

Chapter Summary

Through qualitative methods, specifically CIT, I plan to interview a target sample of 14 female deans of colleges of agriculture and vice presidents with agricultural governance responsibilities at land-grant universities across the United States. During an hour-long interview in their office, I plan to ask questions about past critical incidents that have occurred in the course of their work and how they have learned from these incidents and have in turn modified their leadership. I also plan to collect field notes before and after the interviews taking notice of the surroundings and interactions within the offices of these women. Lastly, a light document analysis of the administrators' vitae and individual university web pages allowed for further insight into the nature of the past experiences of the women and current culture of the college.

After the data was transcribed, member checks allowed for the interviewees to verify the accuracy of the data. Additionally, data was stored on my personal laptop computer that is password protected. The data and all conversations with the women were kept confidential. The data was analyzed utilizing a constant comparative method and categorized according to themes, and patterns that were identified and noted in reporting.

To complement the interview, document analysis included studying the written descriptions of program records, official publications, reports, office memos, correspondence, and/or even written responses to questionnaires and surveys (Patton, 2002). Combining these

two research tools, interview and document analysis, allowed for an enhanced descriptive view of the women's words and life experiences in this study.

CHAPTER 4

RESULTS

This chapter describes the qualitative data collected through critical incident methodology. Examining the data through a critical feminist lens, this study analyzed interviews with a comprehensive sample of women in agricultural leadership positions, specifically deans and vice presidents, at land-grant institutions of higher education. The study determined what incidental/informal learning experiences occurred as a result of a critical incident(s) that inform the leadership views and practices of women deans of colleges of agriculture or institutional vice presidents with agricultural governance responsibilities. Fundamental questions guiding this study were:

1. What common critical incidents inform the practice of women deans and vice presidents in the male-dominated field of agriculture?
2. How do informal learning and incidental learning shape the practices of women deans and vice presidents in the male-dominated field of agriculture?

Using a critical incident methodology, codes were found by utilizing focused coding technique combined with analytic memo writing. First, I started with in vivo coding which proved very tedious for such a large amount of data and eventually did not fulfill the needs of this study. Then with focused coding (Saldana, 2009), I took apart each interview and categorized it into two categories based on the research questions: critical incidents and the women's learning (Charmaz, 2009, p.59). Next, I used a key phrase within the incident data and

the learning data to form a set of codes. I placed these codes on an excel spreadsheet and compared and contrasted the codes to find themes throughout the data.

For methodological purposes in this chapter, I broke down the data into participant demographics and then into themes from the research. Themes that will be discussed are from the participants' backgrounds as well as related directly back to questions about common critical incidents and key learning that has influenced their leadership.

Included in this sample were women deans and vice presidents of colleges of agriculture throughout the United States. Each of the women deans and vice presidents were interviewed for approximately one hour. As previously noted, the target was to interview all 14 women face-to-face. Scheduling conflicts resulted in some participants being required to interview via telephone. As a result, eight of the participants were interviewed in person. Seven of the women were interviewed on their college campuses and five interviews took place in their college offices. Semi-structured questions guided the interview conversation. As previously stated, the target was to interview all 14 women face-to-face. The participants who were interviewed by phone all sent in their signed consent forms before their interview. As the researcher, I paid very close attention to verbal cues, pauses, and voice inflections while speaking with the women on the phone. Each of the phone interviewees actively participated in the interview dialogue and produced the same results as the participants who were interviewed face-to-face.

Participant Demographics

According to the list of administrative heads of colleges of agriculture published by the Association of Public Land-grant Universities, there are approximately 107 land-grant colleges each with leadership positions within a college of agriculture (e.g., dean of the college, director of extension, chancellor of agriculture, vice president of extension, etc...). In my comprehensive

study sample of women vice presidents and deans of colleges of agriculture, 14 women were interviewed; 11 academic deans and three vice presidents from land-grant universities, including both traditional land-grants and historically black colleges and universities. All of the women that I contacted agreed to be interviewed, generating a 100 percent response rate and a total comprehensive sample of this group.

Interestingly enough, from the time that I started to research this topic in 2010 at least eight additional women have entered into the leadership roles of dean and/or vice president. Currently, of the 14 women interviewed, three of the women are considered interim deans and four others have been working in their position for approximately one year or less. The rapid influx of women into the dean role could be attributed to a number of different factors that will be discussed later in this chapter.

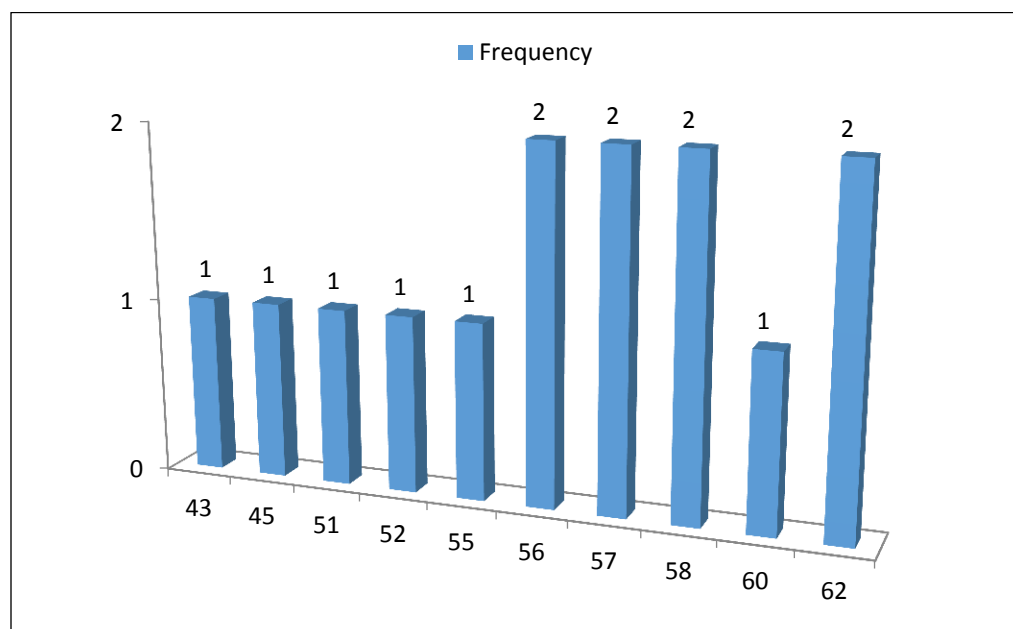


Figure 2. Ages of Participants.

The women in this sample ranged in age from 43 to 62. With only two women in their 40s, most of the women were between 56-62 years of age and considered themselves a part of the Baby Boomer Generation.

The majority of the women graduated with their bachelor's degree in an agricultural discipline during the 1970s and went straight through graduate school to obtain their doctorate. Additionally, most of the women entered into the workforce in assistant professor roles in the late 1970s or early 1980s. A couple of the women had brief careers outside of higher education for a time (e.g., U.S. Forest Service, teaching, scientists, or maintaining family farm). Several women started out in Cooperative Extension and then transitioned into extension administration before becoming dean or vice president. Exactly half of the women mentioned that they were currently married and the other half had never married or mentioned that they were divorced. A majority of the women had zero to one child. There were only two cases where a participant had more than two children. Two of the women in the sample were considered an ethnicity other than white and those two women served in leadership roles at historically black colleges. Three of the women were also serving in interim dean roles. One of the women was about to leave her post as Dean/Vice President of Agriculture and Extension after more than 10 years to serve in a more senior administrative role.

The fields of study that the women had chosen for their undergraduate education ranged from biology to social work and included traditional majors in agricultural colleges such as: horticulture, animal science, agronomy, entomology, food science, and agriculture education. The three most popular majors for deans were agronomy, horticulture, or plant pathology. The University of Iowa along with Cornell University had a strong contingent of involvement in the educational experiences of these women. Three of the women were serving in leadership roles at the same institution where they received their bachelor's degree. Notably, approximately one third of the women attended some type of religiously affiliated private school during their

secondary school experience. One third of the women also spent a majority of their formative years abroad and could speak a second language in addition to English.

Themes of the Study

To showcase the participants' voices, excerpts from actual interviews were separated from the text in this chapter. I also used poetry to illustrate some of the larger themes within questions. These poems are meant to crystallize the data by utilizing various methods of data analysis (Ellingson, 2008). The intention of the poetry is to add depth to each theme and to give more in-depth meaning to the interpretation of the data.

Themes within Personal Backgrounds of the Participants

Regardless if the parents or guardians of these women leaders attended college or not, the importance of education within the family unit was usually discussed. Five of the women specifically mentioned that they always had a knack for schooling and enjoyed reading even from a young age; represented with this quote a 62 year-old dean from one research university who illustrated:

I have to laugh because the reason I'm a fast reader is one of my aunts had a collection of Nancy Drew Mystery books and my mother would go visit her and I'd go in the basement and check out her collection and start reading a book. And my mom would stay typically about two, two and a half hours and if I read very, very fast I could get through the whole book. My aunt wouldn't let me take them home to finish them because she valued her collection. And so because my aunt was stingy about sharing her books, I was forced to read very fast to get through them. And so I kind of give her credit for being able to read quickly and so that's turned out to be a big advantage.

Another 51 year-old dean talked about her parents enrolling her in a book club:

I know that we used to get this little pamphlet, you could order books once a month and so my parents allowed me to get a book a month except every six months I was allowed to get two and one could be like a comic book or something, you know what I mean?

The majority of the women were not the oldest child in their family with all but two women considering themselves the “middle” or “youngest” child. The women often referenced the educational experiences of their siblings as influencing their outlook and interest in furthering their education in college. The women often spoke about older brothers and sisters who “made it” or “didn’t make it” through college as they framed their reference for their own college experience.

The majority of the administrators’ mothers were homemakers which was characteristic of women’s work habits during the time period of their childhood development. Many of the women talked about their mothers playing an influential role in helping to encourage them to pursue an education and advanced degrees, even if they were unsure of what their daughters were studying. Fathers tended to play an instrumental role in influencing their daughter’s education as well. One of the deans in the sample, a 62 year-old woman serving in an interim role, came from a very conservative upbringing in another culture. Before she came to the United States, she had to talk her father into letting her study agronomy. She told her dad that she would not actually be doing the work as the farmer does with the soil, but instead she would teach others how to do it in classes at the university. When described in this circumstance, her father agreed to let her pursue her studies.

In just two instances the women attended college because it was something that they thought they should do, even though they really were not sure why at the time. In those cases, the choice to study agriculture or get involved with it as a discipline may have come later in their

academic pursuits or developed as they chose their career. In several instances the women did not think they would eventually work in higher education until they were upwards of attaining their master's degree and were looking into doctoral programs.

Themes from the Findings Based on the Research Questions

The first research question is stated, "What common critical incidents inform the practice of women deans and vice presidents in the male-dominated field of agriculture?" In the following paragraphs, the first question will be discussed along with themes within critical incidents. There were four themes that emerged within the findings of the critical incidents that the women experienced.

Table 4

Themes for Critical Incidents

Managing the Arbitrary Workplace Phantom of Microaggression

- Microassault through verbal insults
- Microexclusion from conversations and/or mistaken for anyone but the leader

Participant Quote: "My name is not Barbie."

Weathering Complex Workplace Relationships

- Assigned a difficult task and not given the resources to accomplish it
- Boss' leadership style disengaged them from their work

Participant Quote: "My department head at the time was totally unreceptive."

Developing Leadership Through Sponsorship

- Did not view themselves as a leader until they were approached by their mentor/sponsor to apply for a leadership position
- Felt validated after their mentor/sponsor told them they could be the leader

Participant Quote: "The president saw potential in me."

Evolving Amidst Adversity

- Had to make a quick decision about how to respond

Participant Quote: "I will not tell you that."

Trends in Critical Incidents that Inform Leadership Practices

There were several trends in the critical incidents that these women shared. As a faculty member all but two of the women spoke of experiencing microaggressions, to be defined later in this chapter, in the form of verbal insults, exclusion and the like. Another notable contingent of women weathered complex relationships with colleagues, a direct supervising department head, or former dean of the college. There was also a strong representation of women who referenced being highly networked and sponsored by senior faculty, enabling them to be considered for their current role as an administrator. The women talked about experiencing a time when they had to perform difficult communication in the workplace. Through this communication they evolved in their leadership. The women also referenced particular life events such as sabbaticals, death of parents, and becoming foster parents that led to transformative learning experiences. Three of the critical incidents were mentions of sabotage by other colleagues while the women were engaged in the tenure process. Another three referenced self-realizations in the moment that the incident that was occurring.

Managing the Arbitrary Workplace Phantom of Microaggression

Leader

Soiree, donors

He introduced me

They realize I'm different

Woman

The title of this theme, Managing the Arbitrary Workplace Phantom of Microaggression has meaning in dealing with the sensitive and personal nature of these women's experiences with bullying, exclusion, discrimination, harassment and gender bias in the workplace. Gender-based

microaggressions are defined as “brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory or negative sexist slights and insults toward women” (Nadal, 2010). Much like a phantom, all but two of these women referenced a haunting personal experience with gender-based discrimination or sexism. Not in every case was it obvious the apparition was there, but the effect of the encounter obviously had enough influence on these women that they were referencing it years after its occurrence.

Not all of the time, did the women feel that this type of treatment was intentional and in not one circumstance did they “play the victim” while talking about their experiences with microaggressions. Many times the women almost felt guilty about mentioning gender as it related to a critical experience of sexism that they have had, but through continued verbal explanations discussed that gender was indeed a factor in many of these workplace incidents.

Exclusion is a popular microaggression experience that these women talked about while working alongside mostly male colleagues and high level alumni and friends of the college. Networks of male colleagues have been built over years of time and in many cases the women who enter the role of dean or vice president have to figure out how to enter into these networks in a way that is meaningful and significant. This entrance does not come without a cost. Microaggressions in the form of exclusion can come in the ways of: subtle information “non” sharing by colleagues, exclusion from decision making, undervaluing their workplace contributions, and incomparable salaries.

Because the role of dean or vice president has been traditionally held by men, the women many of whom are the first of their gender to inhabit the role, often feel as if they are the unexpected leader. The women referenced being mistaken for administrative support staff,

mothers of students, or anyone but the leader. In some cases, workplace intimidation through exclusion was not an overtly threatening tactic, but one that could still derail and debunk the women's power and positionality as the leader. In this way, the women may not even realize how this tactic is affecting the culture and climate around them as it relates to their leadership.

Illustrated in this excerpt from a critical incident, a vice president from one university tells a story about attending an event to exemplify her experiences as the unexpected leader:

We were at a very big soirée together one time, I think I'd been in the job a little over a year and it was very big soirée and there were all these big donors and this sort of thing. And this gentleman came up to him as I was standing there and said, 'Oh, I hear that the new [national] director, Dr. Coleman [pysedonym], is going to be here. I'm really looking forward to that. I can't wait to meet her. I heard a lot about her, I really can't wait to meet her.' And so I held out my hand and I said, 'Hi there. It's lovely to meet you. I'm Sarah Coleman.' And the look that crossed his face, I knew instantly I was not what he was expecting. In fact, I don't think he believed me. I think he thought I was joking, and just sat there looking at me until the gentleman that I was with said, 'Yes, this is Sarah'...and he still just kept looking at me like, 'I didn't know'...and I've had that happen to me a lot in my career, that people when they meet me, I can tell I'm not what they expected. And I've asked people, 'What is that? What were they expecting?' and I don't know what it is...

In addition to being excluded or being found as the unexpected leader, the women talked about overt tactics such as workplace bullying by other colleagues. In some instances the women were bullied by others who felt threatened by them in some way. One of the deans discussed that as a new assistant professor, she had a colleague try to keep her from moving

forward on the tenure track because they were researching the same enzyme. He felt she had taken away his opportunities by being awarded grants and gaining notoriety for her research and he told others that she would get tenure “over his dead body.”

The women often shared that they experienced workplace bullying as a relatively new faculty member or staff of the college. During her interview, a 55 year-old vice president shared a story about walking down the hallway of her building as an excited new faculty member and being addressed by an older male colleague:

I had an older professor who, as I walked down the hall one day, referred to me as ‘Barbie.’ And I said, ‘My name is not Barbie’ ...thinking he had mistaken me. And he said, ‘Yes, I know, it’s not worth my time to learn your name’ ... [laughs]. I was stunned.

Overt bullying also was experienced by the women as students. A 62 year-old dean shared that during her graduate coursework she was challenged for making an “A” on the end of course test by a professor in her department:

Near the end of my Ph.D. period I was taking an advanced crop physiology course and I remember there were about twenty of us in the class and I was the only woman. And I studied so hard for the final exam. I remember going in for the final exam, and I’d sit down and the guys would sort of hang out together on the side of the room. And there I’d be sitting on the other side. When I went in to pick up my graded exam, my final exam and get my grade, and there was an “A” on it and then crossed off and there was an “F”. And I asked the instructor, ‘What’s going on? I really studied for this test, I thought I did extremely well.’ And he said, ‘Well, you got the highest grade in the class. You had to have cheated.’ And I said, ‘I didn’t cheat. You saw me. I was sitting by myself. I had no notes, nothing. I didn’t cheat. I studied.’ And he said, ‘Well, if you studied, you’d be

willing to take an oral exam right now.’ And I said ‘Okay,’ and he asked me questions for about an hour. And he said, ‘Okay, you got your grade.’ Never apologized... nothing.

Many of the women discussed, being the only woman employee or the first ever woman to serve in their department. In one case, the woman viewed herself as the individual who could stand in the gap for their students who had difficulties working with other professors in their department. One 60 year-old vice president told a very meaningful story about her journey helping female graduate students:

And so they’d come to me. And they’d tell me that things were happening that just were not acceptable. And then I would ask them to write down these stories that they were telling me so that I had something in writing to take to the department chair or administration. They could go through a whistleblower thing or they could go through...and I’d tell them about these mechanisms. Then there were two women, in particular, young women graduate students who were in such fear of retribution by their advisor that they were afraid to do it. They were afraid that they would never get a career in that field, that they would be blackballed, that if they raised any of these kind of issues that their careers would be over. And so as the months went by and I was trying to find out what my options were to deal with this and deal with this older male professor, I finally...went to the department chair and I said, ‘Look, I know that they’re supposed to be willing to confront this. Frankly, they’re afraid and we’re ruining their graduate experience. We are potentially ruining their careers. We are not doing anything to help these two young women and we need to do something about this.’ So, a couple of days later he called me into his office and there was this professor. And the department chair

said to me, ‘I called you in here because I think you two need to resolve your differences’... What was I going to resolve? I looked at the department chair and I said, ‘Really?’ and he said, ‘Yes, sit down, we’re going to talk this out.’ And I said, ‘I don’t know what there is to talk about. Your behavior is affecting these two students in an incredibly negative way and they are so afraid of you that they won’t even...they don’t want to move to a different major professor because they think that you will ruin their careers. They don’t want to quit graduate school because they want a career in this field. So, your behavior is unacceptable.’ And by then, he’s sitting back in his chair like this, his hands are back behind his head. He leaned back in his chair and said, ‘I can’t help it if they think I’m God.’

Further, it is in this section of critical incidents that the deans and vice presidents in the sample mention their struggles for pay equity, being respected in group discussion, feeling deliberately excluded, understanding their role as a the token woman representative on committees, and having feelings of un-comfortableness around groups of men who were engaging in stereotypical masculine behavior.

Often it seems that intimidation tactics were used to personally deconstruct the women in an effort to take away power from them in the relationship. Each of the women who referenced gender as a piece of their critical incidents was very aware of the fact that being a woman leader in a male-dominated field comes with its own set of challenges. Each of the women, however by the nature of their current position, seemed to have navigated these incidents in such as a way that they were not stifled by them. On the contrary, they used the incident to develop a greater understanding of how to work through gender-based workplace intimidation and develop a set of skills to survive that environment or particular situation.

Weathering Complex Workplace Relationships

Handle this problem

Biology? I broke down...

Realized leadership

The second theme in the critical incident findings of the study is that ten of the women specifically mentioned weathering very complex workplace relationships leading up to their time as an administrator. These relationships, oftentimes with a direct supervising department head, former dean of the college, or other senior administrator led to self-discovery and action through enduring a set of difficult circumstances.

The word “weathered” was chosen to illustrate the storms these women endured over time that led to their action or reaction in the situation. Often because the women were extremely high-achieving they were given tasks that were considered impossible to accomplish. In some situations, they were expected to make something wonderful out of something terrible, and then given limited resources to do it. The women were set up for failure but expected to succeed through carrying out the wishes of their supervisor who had sometimes displayed poor leadership ability. Below is an excerpt of an interview with a dean from one research university who discussed being placed in a difficult role by her supervisor:

When this new chancellor came in, biology, she had been told, was the biggest problem on campus. And it was. And that is what I was inheriting, was the biggest problem on campus. And, to me, really required this careful attention to building relationships and trust and community. And there were a lot of bridges that had to be rebuilt that the previous director had just shattered and burned. And so, there was a lot of work that I was doing. She [supervisor] came in and started pushing on me super, super hard to

make change happen like that [snaps finger]. She wanted to come in like a wrecking ball and just change everything and she wanted to just tear it all down and rebuild completely but without any understanding of the system that she was working in.

In this case, the dean was torn between honoring her administrator's wishes and doing what she felt was right to lead the biology program. Another dean discussed how her department head blatantly put his name on others' work in order to take credit for things that professors were doing inside the department. Still another dean referenced how poor communication within her department, starting with her department head, caused her to begin searching for another position which she landed, and now she is employed as dean of a college. The 51 year-old dean recounted the incident:

I think the new leadership was trying to take other leaders at the chair level and just kind of floated ideas and sent test balloons out without telling all of the people that could be affected by it, that this would be happening and then...I would be receiving calls from numerous people saying, 'Are you aware of X, Y and Z?' and I was totally unaware of these things. So, that was, first of all, shocking and these were things that would have affected my department a great deal but I hadn't been told that it would happen; and, then when I had a discussion with leadership in a very professional way, I would be basically told, 'Hey, this is none of your business, I make these decisions'...I was really shocked by it. In fact, I've never been treated that way ever in my professional career where it seemed like a total disregard. And so it was quite shocking to me and I can say that I was angry about it, not directly to them but...I respected still the position that they held, but I

was angry about just the process and the reaction to that and the person not caring that I was surprised that this happened that way....everybody else seemed to care that it happened that way, too.

Overall the women who talked about enduring these challenging circumstances focused less on the “person” and more on the circumstances that they were being dealt. They often referenced that this witnessing this poor leadership allowed them to understand what not to do in certain circumstances. The women exhibited great persistence by navigating through each circumstance which did not always have a positive outcome for the participants, or the program, or themselves. These difficult relationships were a result of the women dealing with demanding supervisors and uninformed leaders who often bulldozed and bullied others to reinforce their power and positionality as the leader. One 55 year-old dean illustrated:

He said to me, ‘You’re not paid to think, you’re just paid to do what I say.’ And so that...actually, so I quit. And that was a huge thing and in fact, that was probably the most important directing decision that I made in terms of the impact that it had on my career because I am always perfectly happy working as a technician. But, then realized that if that was the way that I was perceived and that was the way that it was going to be, that I really wasn’t expected to think, then that wasn’t really what I wanted to do.

Developing Leadership through Sponsorship

Dean

Hard-driving, Perfectionist

Working all hours

To make her successful

Sponsor

In eight of the critical incidents, the women referenced that they were highly networked and were often sponsored by senior faculty who enabled them to be considered for their current role as dean or vice president. Specifically, many of the women mentioned that they had significant relationships with the previous dean of the college and/or president of the university in which they worked. These relationships ranged from former deans asking the women to apply for leadership positions, to being identified as a high-performing faculty member, and also feeling supported to become an administrator themselves.

Some of the women made statements about expanding their network while in the professorate to include senior administration by serving in roles with faculty governance; however, others mentioned that administration made them feel supported to aspire to leadership by inviting them to serve in leadership roles. The women mentioned more cases of being mentored and/or supported by male leadership than female leadership. This could be for a variety of reasons, such as; women in leadership positions in this field are sparse and men tend to hold more positions of power. However, in cases where there was a female dean, before the current female dean, the women talked about having a good relationship with the former leader. Several of the deans reflected, “The dean who was at the State College at the time, the first lady dean, she came downstairs one day and I was working and she asked me if I’d ever thought about being an administrator...” Another dean stated, “The President saw potential in me and she signed me up for Food Systems Leadership Training.”

Food Systems Leadership Training was referenced by a large majority of these women. As costly as it was to attend, all of the women said that it was a very valuable piece of their leadership development journey. Because it was so costly, senior administrators who were often

in control of discretionary budget dollars sponsored these women by advocating that they gain a spot at this training. Many times the women attended the formal leadership development training after they were selected to serve as an administrator.

Men in leadership positions also played an instrumental role in mentoring and advocating for these women to enter into the position of dean and/or vice president. One 56 year-old dean and vice president reflected on her call to leadership by senior administration:

Then the new Provost who had been a Dean asked me if I'd be an Associate Provost.

And, then I did that. And then, he wanted me to be the Dean of College of Ag; and, so there was an internal search and I was selected...

A theme throughout the critical incident data was that people in positions of power took notice of these women and decided to invest in them. Investing by way of spending time, sharing their network, or even advocating for the women to rise to the next level by taking the position of dean, was a clear way that senior administration contributed to the success of the women's careers. The following excerpt was taken from an interview of a dean who has been in her position for just over one year. This dean, in her 40s, talks about her relationship with the President of the institution as being one of the key reasons she was hired into the dean role:

I think people...when he first came, people went to him and talked about the potential in agriculture. And he came over to see and learn. And he met with me and he started to hear. And I felt his support for agriculture, and I felt his support for wanting to bring in new leadership and for me. When he got there he said, 'You know, I've got some plans for you.'

In the following case, the relationship with a female mentor turned to sponsorship after the supervisor left her position. The dean at a historically black college recounted her experience:

Actually, I didn't even know that she even thought I was doing a good job until she left and talked to me and told me how much potential that she thought I had. And she told me, 'Don't let men tell you what to do. You do what you need to do. You've got everything you need to be successful.' And I thought, 'And all this time I thought you hated my guts!' [both laugh]. You know, but that, too, was...that was a really good learning experience. She pushed me. And so the interaction with her, she opened up the door but it was a hard road there for a couple of years, and I didn't like it so much. But my job, I thought, was to make her to look good and that's what I always did. So, whatever...if she fussed and if she expressed that she was disappointed or she...got upset, my job was to make her look good, and that's what I worked to do. So, I'm always forever grateful for her for opening up that door for me because honestly, I don't think that any other person in that job would've done that. I don't.

One 51 year-old dean shared about her experiences as a self-coined "reluctant leader." She discussed that she never had the internal self-confidence to become the leader, but she believed other people when they saw something in her and told her that she would excel in a leadership role. This woman was awarded a dean position after one of her colleagues actually filled out the job application for her. She stated:

And sometimes I think...and I call myself, there's a term, like 'a reluctant leader'...I've always felt I've been that way because if you really ask me, I never wanted to be any kind of administrator. I never wanted to be the chair and then I became the chair and I

never wanted to be a dean and here I am....but I do love science and basic research and teaching and so I do miss that somewhat, but I still feel that...I think others saw things in me that I maybe I wasn't willing to see or...I don't know.

In the sample, data suggests that novice women administrators would make these types of statements as compared to veteran women.

Evolving Amidst Adversity

Sudden accident

What do I say about it?

Must comfort loved ones

While speaking out about critical incidents in their careers, 29 of the 42 critical incidents described situations where the women self-reflect on a difficult experience through which they evolved into a better leader as a result. Firing employees, communicating deaths of students and a professor, being featured on public radio, and answering a derogatory student editorial in the campus newspaper were just some of the experiences that the women shared that were critical incidents in their careers. In each circumstance, the women reflected on how they responded and then compared it to what they could have done differently. The women also discussed how the situation changed them in some way. A 56 year-old dean and vice president reflected:

I was in the office, it was like four-thirty and I was meeting with a director of facilities and budget and finance and they came in and...they said 'There has been a van accident' and I said, 'Well, where were they?' and they said, 'They were on a field trip looking at farm equipment.' And because I had been the dean I was the dean of agriculture as well, I knew exactly which class it was and so...we called the department head and got the class roster. He knew who had gone on the field trip and there were various things...I mean, it

was an incredible time. But anyway, so then CNN found out, and [state] TV, and sent a reporter. And we told him that we would not release names. And he was saying, ‘Oh, this must be’ and they had me talk to him at one point. And I was on the camera and he said, ‘This must be a really bad time.’ and I said, ‘I just feel so for those families.’ And he said, ‘Now, I know that one is an instructor...could you tell me what the class was?’ Well, I knew if I told what class then the family would know if they were listening; And, we knew the family didn’t know yet. And it just freaks me out. He was trying to trick me into saying that. I looked at him and I said, ‘I will not tell you that’ ...I just thought, you know, here is this family who has just lost the dad and husband and you’re trying to trick me into telling you. It was just...I mean, the next day the department head and the president and I, we had to have this news interview and there were cameras and microphones...and photographs. And one of the photographers asked the department head, ‘How do you feel knowing that you approved them to go in a fifteen passenger van?’ And I just freaked out. I just said, ‘You’re asking a person who has lost his friends and his students....I can’t even believe you’ve asked that question.’

Some of the women talked about personal missteps or the fact that they should have made a more effective choice in their communication. One 57 year-old dean referenced a harsh response that she wrote to a student editorial in the campus newspaper:

And when we announced that we were going to have the [company name] Student Services Wing, one of our students in the college wrote an editorial to the Daily that was really just incredibly hurtful. Talking about what an evil company it was and how inappropriate it was for the college to take an action like that and as dean...and as a relatively new dean, you know, you read that and you think, ‘Wow, all of our alums that

work at this company, all of the partnerships that we do together...we certainly don't see this company as an evil person.' And so, I wrote a response working with my communication director to the editorial...And so, then I kind of get emotional about it because what I didn't understand at the time because I was so new and my position was, that as the dean, I hold a tremendous amount of power. And I just don't think of myself as that. I don't think of myself as a powerful person. I just think of myself as an individual. But what I'd done with that particular student was really inexcusable. I never should have written such a...harsh response. It was a great response, but not a great response from the dean of the college where that student was studying. And then I never knew how to fix it. What do I do to tell the student, 'Well, darn it...I didn't remember that you were the student and I was dean.' And so, that was just one of the most important lessons that I learned. And, you can tell that I'm sorry.

The women often talked about understanding that anything you say is said not by you, but by the dean or vice president of the college. The women understood that the person in the role of dean is often asked to comment on certain issues or topics. One 57 year-old dean regretted her response that ended up on public radio:

And I'm not an animal scientist but I hang around with a lot of them. And I certainly understand the poultry industry and as an entomologist. I'd done fly control research in chicken houses. So, I ended up being down with the state legislature and the issue came up about the recent ruling where changing the size of the cages that chickens are housed in and what did I think about that. And so, I was happy to make a set of comments about what I thought about that. And then it ended up being on Public Radio looking like somebody that probably didn't have a clear understanding of what the issues were

because I was only too happy to share that from a set of practices...science would say this. I didn't really adequately represent my position... My husband always laughs and says, 'Thank goodness that there was some major event that occurred that quickly removed me off the radio' [laughs].

Another dean reflected that she felt that doing performance evaluations was a very growing time for her. She discussed the need to be honest with employees in talking about areas of growth and improvement for them. The dean reflected that not to discuss performance improvements because you were personally uncomfortable would just be selfish. She said that she had to learn this over a period of time because she had felt uncomfortable talking to people about areas to improve.

One dean, who spoke English as her second language, talked about continually translating for others. Translating culture, translating science, and translating messages both positive and negative to everyone in the college were critical incidents. The act of translation of the way she was used to working in her culture and the way that American's work was very different. She mentioned that her culture's work ethic was hard-driving which led to some self-realization about how she must operate within her new role as dean. This woman discussed that she often researched in order to distract herself or keep her plate filled so as to not overwhelm her staff with constant new tasks.

Informal and Incidental Learning that Influences Leadership Practices

The second question is stated, "How do informal learning and incidental learning shape the practices of women deans and vice presidents in the male-dominated field of agriculture?"

The five themes found around this question were very clear. The women learned a great deal from their critical incidents and they knew those life experiences had a direct influence on their leadership practices.

Table 5

Themes for Learning that has Influenced Their Leadership

Decoding the Spoken and Unspoken Culture of Academic Leadership

- Survey the culture and know the key players before they act
- Manage to network and negotiate with leadership to accomplish tasks

Participant Quote: “You have to have a strong relationship with people in order to get results.”

Maintaining Authenticity and Applying Necessary Mirroring Behavior

- Practice being “tough but fair”
- Understand how to lay out credentials before sharing ideas in a meeting
- Practice direct and thoughtful communication

Participant Quote: “If something bothers you, confront it.”

Purposefully Creating an Inclusive and Civil Work Environment

- Value people as the most important asset to the organization
- Desire productivity through positive motivation and incentive building

Participant Quote: “Find those gifts people have and let them develop those.”

Embracing their Personal Power as an Administrator

- Understand the importance of always being “on” for your employees
- Practice excluding people from leadership positions who are unfair to others

Participant Quote: “I really try to understand what my position is instead of thinking of myself as just another individual and you do have to moderate your response because of the position you hold.”

Developing a Leadership Persona

- Understand that personal appearance, voice and email dialog is a vital part of leadership

Participant Quote: “Losing yourself is a lot worse than losing your job.”

Decoding the Spoken/Unspoken Cultures of Academic Leadership

Study the culture

Invisible barriers

Perceptions can change

Participants in this study often discussed their current role as the academic leader of their college. Many of these women have learned and become aware that there are expectations and preconceived notions of the person that serves in this leadership role that they themselves may or may not fulfill. Twelve of the women discussed learning to how to decode the written and unwritten cultures of academic leadership in order to effectively navigate and lead within the culture. Of course the written rules, such as, be present at work, understand basic leadership principles, model the behavior you want your employees to exemplify, act and look like the leader, and do exemplary work, were understood as leadership norms.

Unwritten rules often took time for these women to learn, but many of them seemed to be astute enough to decode these rules and learn how to navigate the culture and climate of academia. Many of the women were active students of their culture and wanted to get to know the climate of the college and the needs of the people that they are serving. One 62 year-old dean talked about building a culture of trust with the folks in her college when she first started her role:

And I would advise anybody who was assuming the position in leadership to not come in and do things right away but come in and study the culture, study the environment you're in very carefully, study the people because there are always written rules that are very visible but there are also invisible unwritten rules that you need to be aware of. And then there are a lot of perceptions, when you come into a position there are a tremendous number of perceptions about what is possible and what's not. And I think...sometimes those perceptions are like these invisible barriers...don't make the assumption that they're hard and fast because many times you can overcome them.

In an administrative role, the women also had to learn the written and unwritten rules of navigating a meeting climate in the boardroom. One interesting finding related to boardroom communication was the mention of leaving things unsaid. One of the deans talked about realizing that in “high-level” meetings people might not address the issues that need to be addressed for fear of stepping on someone’s toes or being viewed as someone who is undermining the process at hand. In high-level meetings, it is inappropriate to question the decision that is being made by the leader unless it is seen as a discussion to troubleshoot or validate the leader’s idea. In this way, individuals who are not in the ultimate seat of authority must learn the unwritten rules of the game. A 56 year-old interim dean stated:

Because there is definitely a hierarchy and people are trying to contribute in their jobs but most people are still on the climb, whatever that means, and so you do gauge the politics of the situation and...it is my observation that in high level meetings sometimes people don’t say what they should say because...and that’s kind of...that’s an interesting...

Another unwritten rule was the high quantity and quality of work that has come to be expected from these women in order to gain the recognition that they need to move up the tenure ladder and into an administrative seat. While reviewing their curriculum vitae and browsing through their online web presences, it was amazing to see the kind of work that these women had done over the span of their careers and are still doing today in their own research labs. Highly specialized research, prestigious teaching awards, past positions in leadership, millions of dollars of grant funding, and high level organizational memberships were just some of the pieces that indicated their success on paper. One of the deans at a northeastern land-grant university talked about her struggles as a novice professor trying to move up the tenure ladder:

Well, okay, absolutely, there was an element that I had to work a lot harder than everybody else and in fact, the first time...not first time...I went up for tenure once and I did get it but the first feedback [laughs] that I got from my chair when I put my dossier together was, 'Oh, your research is weak, one of the faculty members said your research is weak.' And well, at that point, you know, I had seen the kinds of numbers of papers others wrote and I could see how much research dollars that I'd brought in relative to everybody else and I knew that was absolutely nonsense. And so, of course, I was annoyed with that comment but what I did was...get some advice with regard to how to rewrite that section in my dossier in a way that would come across more powerfully because it's true that I had written my dossier very much in just a very factual, very...you know, 'the facts will carry me' kind of way, all I have to do is lay it out there. But it turns out I needed to do a little more marketing than I had realized.

As a result of the pressure that these women feel to produce high quality scholarship, and maintain a strong presence within the college, an intense work ethic was another item that the deans and vice presidents often discussed. All of these women talked about having great difficulties with work-life balance. One said that there was no such thing. Several called themselves "work-a-holics" and others said that they could be at an event at least five of the seven nights in a week. If the deans or vice presidents were married they often referred to their spouse as supportive of their job and work commitments. One vice president talked about bringing her newborn baby to work as a new faculty member for quite some time. She also said she brought her son to numerous events for the college while he was growing up. She did not

hesitate to do what she felt she needed to do as a mother and an employee. More times than not however, if the women had children, they did so while they were in the early stages of their career.

Maintaining Authenticity and Applying Necessary Mirroring Behavior

Communication

Act more serious, lady

Respond with frankness

Another theme in the data was that the women learned to communicate as their authentic self but were also able to mirror masculine communication styles when appropriate. In each interview the women mentioned communication as an important part of leadership. Of the 42 “learnings for leadership” mentioned, eight of the stories explicitly related to the women intentionally practicing effective communication as a part of their leadership practices; all of the women mentioned effective communication as an important aspect of their leadership in some way during the interview. There was an overwhelming amount of data to suggest that these women strived to have thoughtful, clear, and effective communication.

For the specific learning mentioned, the women stated that they wanted to use their communication to build consensus and to gain feedback from constituents throughout the college who could contribute meaningful input. The critical incidents that the women had with communication have shown them what to do and what not to do as an effective communicator. One vice president explained:

I don’t dictate. I listen. Only when it becomes obvious that I have to make a decision because nobody can come to resolutions do I make the decision and that’s when I finally dictate what’s going to happen, but I have listened and I get input. I do not make

decisions on my own unless it's Well, there are some that I have to make on my own. But if it's for the better good of the college, I seek input. So, that's one thing, listening. I have learned to...hold my emotions and...even if I'm angry at the time about what somebody says to me, I just continue to take the strategy that I learned there to be patient, walk away from it if you have to and then deal with it later. But do not react emotionally to fuel the fire. So, those are the kinds of things that I've learned. I also have learned that there are times when you can't approach something from an obtuse manner that you finally you have to...if you can't deal with it in an obtrusive manner and get somebody to see or...whatever the situation is, then you have to hit it head on, directly. And that's another thing that...I just...if I can try other methods to bring people along or whatever and if that finally does not work and the issue still lingers, then it's time to hit it directly, head on.

The women referenced interpersonal communication skills as something they found very important but sometimes hard to develop. Several of the women talked about being very intentional with building these skills. One dean traveled across the country to attend a specialized leadership institute that assisted her in building better interpersonal skills. Other deans referenced the tendency in agricultural academia to be more left brain proficient. It is not a natural tendency as a research professor to place an emphasis on having charisma. One of the deans in her 40s stated, "I think it's the interpersonal skills for leadership that are really...important, that kind of charisma... we ask so much of people in academia, it's kind of hard because, you're kind of a geek."

One dean talked about after becoming an administrator that professors often would not take you seriously any longer because you were not actively practicing research. One thread in

these conversations seemed to revolve around the idea of making the connection with “your people” and using interpersonal communication to build a positive relationship. The women seemed to understand that people were their most valuable asset and knowing them on a personal and professional level would not only enhance their relationships but also employee performance.

In addition to communicating through verbal or face to face articulation, the deans and vice presidents must communicate to their constituent base through the written word. A university dean stated:

You can never do enough communication. So, trying to communicate and tell your story in a way that you can...as my communication director always says, ‘All we can do is control ourselves, we can’t control what anybody else will say, but we can control what we say.’ That’s building on all my other experiences. And, so good, timely communication is required. So, we spent a lot of time on communication.

Developing a vision for their college and the ability to articulate that vision was something that all of these deans practiced. The deans understood the importance of leading through inspiration and positive communication versus leading by communicating through negative motivators. The women in the study also talked about navigating gendered communication styles. In the role of dean or vice president, the women found themselves mimicking male communication styles when they felt they were most appropriate. The women often had to communicate inside a mostly male boardroom. They had to learn how to speak so that their ideas would be heard; which, in some instances, was mirroring male communication. A land-grant university dean discussed her strategy for effective male-mirrored communication:

But generally what I just kind of do is I recognize, alright, this is how this is and guys tend to lay out their credentials first and that's just what guys do and they want to know where they fit in the position in the hierarchy and so I know that I tend to get disregarded at first. But then when I open mouth I lay out my credentials and I have something to contribute, I just don't talk just to hear myself talk.

By sharing her credentials, this dean is communicating in the masculine language of those around her in the boardroom that typically use the same communication style.

Other strategies of mimicking male communication such as voice tenor and tonality was discussed during some of the interviews. Three of the women talked about intentionally lowering their voice tenor so that they would be taken more seriously. Another woman said that she felt blessed that she had a voice with a naturally lower tenor which she felt contributed to those around her taking her ideas more seriously. One 52 year-old vice president felt that women in higher educational leadership positions are expected to be staunch and serious and may have difficulty fitting into that expectation if their natural tendency is to be feminine and vivacious. She stated:

And that's why I call it the Katie Couric Syndrome. I think when you are a shorter woman who has some feminine characteristics and things like that... I think that they have a real tendency to try to put you into that Katie Couric kind of mold because I think it makes them more comfortable. So, I just remember that incident trying real hard not to let them put me into the Katie Couric mold...and so there have been many times and that was probably when it crystallized in my head, that I tried really hard to not let them see me as Katie Couric. For a period of time I will admit that I tried very hard...when I spoke, to not let my voice get too high to try to keep my voice very low and measured as

I spoke with them and things like that. I think that...that was probably a time when I was a little un-humorous, not anymore, but there was a time and I think I did that intentionally because I thought then they would see me as more serious and would take me as more serious. And I think that happens to a lot of us in leadership and I think maybe it is not fair to say to my colleagues. But in agriculture I think that happens to us. I see a lot of women leaders in agriculture who seem to me have become a bit humorless and I think that some of that is because of that. I think that you adopt some of those things and I think after a while, you know, it becomes who you are.

Email communication was also discussed. Several of the deans and vice presidents talked about never using exclamation points or anything too informal in their emails. The deans and vice presidents also seemed to be able to understand the need to be open and honest with others when the time was right. Situations where as the leader you feel something different needs to be done or that a difficult conversation needs to take place were something these women were willing to handle. A 62 year-old dean stated, "And then if something bothers you, confront it...time and place, confront."

The women also talked about using the power of persuasion and allowing others to think that they thought of an idea in order to create change. In no sense did they seem to want the credit, they just wanted the best outcome. This communication tactic seemed to be referenced most often when the women were talking about communicating with men. The women understood that making their idea become "his" idea was the way to get the idea across the table and out into production.

Purposefully Creating an Inclusive and Civil Work Environment

In-civility

Operated too long here

Academia

Another theme that the women talked about was how they strived to create a positive work environment. The women felt that it was important to have a culture that made everyone feel valued and also celebrated people's gifts. They talked about not being afraid to be different in order to set the tone for the type of work environment that they wanted to create. Out of the 42 "leadership learnings" mentioned, 11 stories dealt directly with creating an inclusive culture and civil environment at work.

The women told stories about being committed to their people or the employees that worked for them. They felt a strong connection to those who worked for them and around them. One vice president shared:

I think I strive to create an environment where people will feel comfortable enough with me at a personal level that they'll tell me what they really are about. You always have to be willing to spend the time to draw it out, it's not like I can just say to you, 'Tell me the truth' and you're going to tell me what the whole spread of things are. And again, you're in this squishy world of whether or not...sometimes it's personal things and you don't want to know...and so it's that blend of recognizing that we're doing...you know, we're in a profession and we have work to do but the people do the work and you have to understand and have a strong relationship with the people or it's not going to happen, whatever 'it' is.

Another dean talked about her role as the interim leader:

I have learned to be good to your people. I give people rewards for doing good and working hard. I have an open door policy and sometimes the people they just line up outside... it's like... take a number. I encourage people and offer critiques of how to do things better because people need to hear that. I have been in their shoes as a professor and I know how it feels.

The women understood in some circumstances what it felt like to be in a minority group or a group that looked different from its other members. The women were comfortable articulating the differences that they had experienced. They also truly understood that women, men and any persons who were different from the majority group in leadership could have these experiences as well. Based on the narratives that the women shared, the call for inclusivity as a result of experiences being excluded was apparent. One 58 year-old dean illustrated her attempt to create an inclusive culture:

I feel like that has given me insight into how underrepresented groups feel in certain circumstances, how they can be made to feel uncomfortable or unwelcomed even if that isn't the intent. It's created more of a commitment to having an inclusive environment and inclusive, positive work climate, respectful workplace. And I'd even include, although it wasn't part of the experience then, a family-friendly environment. All of those things being, you know, not...extra add-ons, it's nice to have but essential to having a really high functioning institution that everybody wants to be at.

Civility is a reoccurring conversation that presented itself throughout the interviews. The women recognized when people were uncivil towards each other and they intentionally penalized people who perpetuated incivility towards fellow colleagues. They did not believe that being an

expert on something or a leading researcher in a certain area gave people the right to be uncivil or to use microaggression tactics to gain power within the workplace.

Part of creating an inclusive culture that is a positive place to work is also stopping the negativity that might have been embedded into the culture that the leader inherited. One vice president talked about her experiences deconstructing power relationships with employees who were deliberately uncivil. She stated:

So, that was one experience about this ‘good ole boy’ power structure that was just totally unacceptable and I knew that I ever had an opportunity that I would do what I could to prevent those kind of people from poisoning the environment for men and women and for the faculty. That was totally unacceptable kind of behavior and at the time I had no power to do anything about it.

One vice president also went on to share that she acted to correct situations now that she does have the power to do something about incivility. This leader intentionally recognized who the toxic people were that contributed to tearing down the positivity within the organization. She also had a rule of not including any of those people in the interviewing process, excluding them from any special committee work, and also placing them in high visibility positions, as to limit their influence and power. She felt that this was important to keep others safe from exposure to these individuals in order to limit their negative influence on the organization.

Embrace their Power and Positionality as an Administrator

You are the dean now

Personal identity?

Lost for the time being

Throughout the interview dialogue many of the deans and vice presidents spoke of understanding the power and positionality that they held in their position and were very cognizant of both in their leadership practices. Twelve of the women mentioned understanding their power and positionality as a leader at some point during their interview. At least ten of the “learning for leadership” statements mentioned an awareness of power and positionality as it related to the women’s work as an administrator.

The women talked about how when they became the leader they were held to a higher standard around their workplace. They were viewed under a tight microscopic lens and often the words that they spoke no longer came from them as a person but from the dean and/or vice president as the position. It seemed that the more seasoned the administrator, the more aware she was of the power and positionality factor as it related to their leadership. Often the women wanted to use these factors to benefit others, to enhance the college, and to influence others to be more effective in their work.

Well, I try to really understand what my position is instead of thinking of myself as just another individual and you do have moderate your response because of the position you hold. You can’t always decide...that this is the right...you have to think, ‘I’m the dean and what should the dean do?’...

As the leader the women also expressed that they had to gain a greater awareness of what was going on around them. They were not allowed to have a bad day or time off without people talking about it. The women also realized that there was such an increased sensitivity to how they conducted themselves around the office. For example, one dean stated that going to one departmental party meant that you must try to attend all 13 departmental parties, or the people at the party that you did not attend would be upset.

Then the women were very aware of the rumor mill that could start based on a simple conversation that was had with a colleague. One novice dean in her 40's stated:

But I had to learn to be a little bit more suspicious and careful and cautious which is not my nature. I kept realizing the impact that anything that I say or do can have on someone else simply because I am the dean. The influence that my position has whether I mean it to or not...things that I say can be misconstrued...I grew up performing on stage, music, and so I learned early on then that everything on stage is amplified larger than life and so if you scratch your nose or make a face, you know, people are out in the audience looking at you and it's kind of the same thing with the position and the title of dean...you have an influence whether you mean to or not. I don't get to have a bad day, I have to be really careful about...if I scowl at someone, they may take it personally, they're going to think they did something versus maybe I was just thinking of something else, right? And so I have to be really aware of that. And so some of that I think I learned from having to deal with this particular individual. Also, just the fact that there are people like that out there that things have to be documented really carefully and feedback, 'this is what I heard you saying' is really valuable.

The women talked about facing resistance in their position and how they had learned to deal with it by using their power and positionality. The leader in the administrative role before them often set the tone for how some people within the college believed that the women will act. One 51 year-old dean reacted:

And a lot of people may say, you know, why would I give you feedback when you're the ultimate decision maker and you're going to do what you want to do anyway? And I've

tried to convince them, it hasn't been enough time but that's not true with me, that I will listen and I will try to make a decision that really takes your input into strong consideration.

The women administrators must use their interpersonal skills to talk with people throughout the college and gain buy-in through effective communication strategies. Because these women are viewed as the dean or vice president, the reactions that they have through their speech are so important and vital to the morale of the entire organization. If they mistakenly say something wrong then, that message is coming from the dean of the college. One 57 year-old dean shared her thoughts on her learning:

It makes you think about the fact that everything you say and do is captured either on a digital recorder or a video camera. And, so that you really do have to think about what is the message that you're going to share and how does it reflect on the college and how do you have a door that is open for a variety of opportunities and opinions, not just one approach; so I'm more careful.

Developing a Leadership Persona

Administrator

Female, Scholar

Deciding my image

I can be myself

Leader

As many of the women talked about their leadership, developing a leadership persona was discussed. As human beings are visual creatures, we understand the importance of image and these women are very aware of how others perceive their ability to lead by way of their

leadership persona. Physical characteristics such as the leader's speech and voice tenor, dress, appearance, hair length and height were discussed. Many of the women referenced that they felt their natural height, voice tenor and appearance played a factor in their leadership, often to their favor.

All of the women mentioned feeling comfortable with their leadership persona at work. Some of the previously mentioned "learnings" have already been discussed as they are interwoven into the fabric of many of the "learnings" for leadership. The women talked about experimenting with their look in order to see what worked best for them in their leadership role. The transition from academic researcher to dean was discussed with one of the interim deans. As an interim dean, this woman felt that dressing up was more appropriate for her new role. She stated:

I did have to invest in a whole bunch of clothes for this year because I don't have suits, I'm not a suit person. And so, I felt like I did need to dress up. I'm more of a jeans and sandals person. And that's difficult because there is no time and I buy everything online. Some of the women talked about not wearing dresses because they did not like them, while others discussed wearing dresses because it made them feel more comfortable. Some women talked about understanding the need to dress the part of the leader and most of all being modest with your clothes, jewelry and make-up. One 55 year-old dean who had been in her leadership role for nearly three years shared her personal story of developing her leadership persona:

Well, in fact, I am, right now, experimenting with being a little bit more feminine but right up until...I'd say eighteen months ago, I literally don't think I owned a dress. I wore slacks every day and generally with jacket, tailored clothes that were largely severe and largely...well, tailored. And hair cut short, it's been short now for a long, long time

and as I said, no makeup. But in the last eighteen months...in fact, I'm wearing a dress today and a little bit of makeup and so I'm pushing the boundaries at this point because I'm at a level where it is okay for me to be clear on what my gender is. And so now I'm making sure that nobody misses that point [laughs]. And so I have painted toenails today and I'm very conscious about doing that and demonstrating that you can be a woman actually and be okay about being a woman and being in a role like this and so that's the message I'm trying to send at this point. . . So the lessons that you learn through all of this, are to dress to make sure you don't draw attention to anything but your brain, to lower your voice so you don't come across as squeaky or less than serious, wear minimal makeup so that you don't look like you're spending a lot of time on yourself, certain key things like that, that you learn...

However, the participants felt strongly that every woman in leadership should strive to be their authentic self, realizing as one vice president stated, "it is better to lose your job, than lose yourself" in the process of looking and acting like other's expectation of the leader. One woman talked about her decision to become true to her authentic self after having held several high-ranking national leadership positions and then transitioning into the vice president role. She stated:

But I decided, 'Screw it, I'm going to be who I am and if somehow that's too feminine for you or it's too this or that or whatever it is, we'll just deal with it'....and so, I don't actually think about those things anymore. I wear skirts because I like to wear skirts. [Because of my conservative upbringing] it's very comfortable for me and so I don't think about that too much anymore. I used to think, oh, I should wear slacks more. And then I'd wear slacks and it just didn't feel right [chuckles]. And I used to think about,

Yeah, I should keep my hair short. And it was like, I don't like my hair short you know? And there was a point in time in my career where I worried about those things. I tend to not worry about them as much anymore, maybe I should worry about them more than I do. But I don't.

One vice president said that she started a new fashion trend by wearing cowboy boots into the president's office on Fridays. She illustrated:

So I started to change the culture but I always made light of it. I never took it seriously. I always tried to get them to think that I wasn't being...what would be the word...I wasn't in anybody's face about that...about wearing cowboy boots and that stuff, I always made light about it. 'You should get some. They are really comfortable. These are thirty years old.' And then pretty soon, like I said, people started saying, 'Wow...all this positive stuff is happening and she can still wear cowboy boots.' And for me it was like saying to folks, 'Wow, you don't have to be so uptight to be smart and to be accepting of people.'

Based on narrative inquiry the data shows that overall the women have all dealt with understanding what being a leader looks like to those around the leadership position as well as themselves. The women were confident in being their authentic selves and were also willing to try new things within the realm of acceptable behavior. These women were very in tune with the culture around them and desired to meet the cultural expectations of the image of leadership while being true to their personal style.

Conclusion

In closing, using CIT, themes were uncovered utilizing qualitative data analysis from each woman's narrative. The first research question asked if the women had similar critical incidents that informed their leadership practice in the male-dominated field of agriculture; while

the second question asked how does informal and incidental learning shape the leadership practices of women deans and vice presidents in the male-dominated field of agriculture?

Themes for the critical incidents that emerged were:

- Managing the Arbitrary Workplace Phantom of Microaggression
- Weathering Complex Workplace Relationships
- Developing Leadership Through Sponsorship
- Evolving Amidst Adversity

The women mentioned that through these incidents they engaged in informal learning that had influenced their leadership practices. Themes in the learning from this question were that the women strived to:

- Decode the Spoken/Unspoken Cultures of Academic Leadership
- Maintain Authenticity and Apply Necessary Mirroring Behaviors
- Purposefully Create an Inclusive and Civil Work Environment
- Embrace their Personal Power as an Administrator
- Develop a Leadership Persona

Based on conversation in each of the participants' interviews, the women did not play the victim.

Through narrative inquiry, the women wanted to share their stories and paint the picture of the entire situation and their role in it. The women often talked about difficult situations and how through self-growth their personal leadership style was influenced as a result.

CHAPTER 5

SUMMARY AND CONCLUSIONS

It's a good ole' boy network,
But all along in life I think there are people...
Who help you,
Who take credit for your work,
Who put you on committees because you are a woman,
Who are surprised that YOU are the leader,
Understanding what my position is,
I have to moderate my response,
I have to create the conditions for trust,
I have to communicate to be heard,
I have to build strong relationships
Stand your ground,
We can change the culture,
We can continue to learn,
We can understand the difference,
We can be ourselves and lead.

Using poetics as a form of data representation, the above poem was comprised using the voices of all of the participants in the sample and speaks to the messages they shared in the essence of each of their interviews. In the poem, each of the 14 women has a line that represents

them in the poem. The women as individuals were all unique and their collective voices powerfully share a journey of leading in the male-dominated field of agriculture in higher education. As a young person involved in agriculturally-based programs, the role models that I had growing up such as my local county agent, state 4-H leader and other state 4-H staff members were a major influence on my life. It was only when I began my first job in higher education that I realized the shortage of women role models at that level, especially within the traditionally male-dominated field of agriculture where I then worked (U.S. Department of Labor, 2010). Women have always been involved with agriculturally-related work, but it has been within the past fifty years that women were accepted as members of many agricultural clubs and/or organizations. Even in a new paradigm where women are accepted to work within the higher education academic ranks, one might ask the question... Where are women represented at the top? Even though there are only a limited number of women serving in these key roles, gender diversity within agricultural leadership in higher education is at an all-time high.

Largely due to a push from the National Science Foundation and their work in funding Science, Technology, Engineering, and Math (STEM) programs for women, undergraduate and graduate numbers for women completing science degrees have increased exponentially over the last ten years. Beginning in 2008 the College of Agriculture and Environmental Sciences at the University of Georgia had more women enrolled than men and that trend looks to be continuing in subsequent years (University of Georgia College of Agriculture and Environmental Sciences, 2011). Statistics on women in the agricultural professoriate show that there are a considerable number of women instructors, as well as assistant and associate professors (National Science Foundation, 2008a). Women leaders in male-dominated disciplines have been largely

understudied, and even more under-researched are women in agricultural leadership. The conclusions from this study will help inform theory and practice surrounding women's leadership, and more specifically women leading in a male-dominated field within higher education.

Summary

Examining the data through a critical feminist lens, the purpose of this study was to analyze interviews with a comprehensive sample of women in agricultural leadership positions, deans and vice presidents, at land-grant institutions of higher education throughout the nation about critical incidents that have inspired incidental/informal learning on their practices of leadership. There were two specific research questions:

1. What common critical incidents inform the practice of women deans and vice presidents in the male-dominated field of agriculture?
2. How does informal and incidental learning shape the practices of women deans and vice presidents in the male-dominated field of agriculture?

This was a qualitative study in which a comprehensive sample of 14 women deans of colleges of agriculture and vice presidents with agricultural governance responsibilities agreed to participate in an hour long interview about critical incidents and learning that influenced their leadership practices. The interviews were transcribed as text and the constant comparative method was used to create codes and themes to illustrate findings for two research questions.

The findings for the first research question, dealing with critical incidents that emerged, were that the women often had to deal with:

- Managing the Arbitrary Workplace Phantom of Microaggression
- Weathering Complex Workplace Relationships

- Developing Leadership Through Sponsorship
- Evolving Amidst Adversity

The women mentioned that through these incidents they engaged in informal learning that influenced their leadership practices. The findings for the second research question, discussing their leadership, were that the women strived to:

- Decode the Spoken/Unspoken Cultures of Academic Leadership
- Maintain Authenticity and Apply Necessary Mirroring Behaviors
- Purposefully Create an Inclusive and Civil Work Environment
- Embrace their Personal Power as an Administrator
- Develop a Leadership Persona

In all of these cases the women did not play the victim based on their gender, but throughout the semi-structured interview, gender did arise as a factor in many of the critical incidents and learning for leadership they shared. The women were a robust group of scholars, each in their own right, and the majority of them felt that they were not “groomed” for leadership such as is often the case with men but rather learned leadership by living it. The women each had a unique story, but the parallels were uncanny in many circumstances. Each of the themes mentioned above illustrate the personal journeys of the women and how lived experience had influenced their leadership practices.

Conclusions and Discussion

Three conclusions were revealed as a result of this study. Women deans and vice presidents with agricultural governance responsibilities in higher education have:

- 1) traditionally lacked access to existing leadership networks and have learned how to lead as a student of their environment, employing informal and incidental learning strategies.
- 2) resourcefully managed to endure difficult circumstances, withstanding very challenging situations and relationships, often turning them into opportunities for self-growth.
- 3) successfully learned to navigate the patriarchal culture to transcend existing norms, making dynamic impacts in their workplace environments through transformational leadership practices.

Women Learned How to Lead through Informal and Incidental Learning

Conclusion one states, women deans and vice presidents with agricultural governance responsibilities in higher education have traditionally lacked access to existing leadership networks and have learned how to lead as a student of their environment employing informal and incidental learning strategies. Oftentimes the women referenced the good ole' boy network of agricultural leadership that exists today. Within the upper echelons of leadership, which is mostly white and male-dominated, the women do feel that the existing network can sometime be a difficult one to learn to navigate and practice leadership within.

Women administrators in higher education. Women constitute half of the participation in today's workforce but still are unequal to men in pay, promotion, and benefits, among other economic rewards (Knoke & Ishio, 1998; U.S. Bureau of Labor Statistics, 2010). According to the National Center for Education Statistics (2010), 217,000 individuals served in executive/administrative/managerial capacities within all of the degree-granting institutions in the U.S. in 2007. Specifically, in public four-year institutions, there were 81,364 employees

considered administrative with men and women comprising almost equally 50% of those positions, but with only 3% of presidencies within these institutions being held by women (National Center for Education Statistics, 2010).

Research shows the dearth of women in higher education administration seems especially pronounced in departments of science and engineering (Etzkowitz, Kumelgor, & Uzzi, 2000; Nelson & Rogers, 2004), where only 19% of full professors are women in four-year colleges and universities overall, with even lower representation in research institutions (National Science Foundation, 2008b). In 2008, four-year educational institutions employed 77,100 doctoral level individuals in biological/agricultural/environmental life sciences and related fields in academic faculty positions with 35% of all faculty and instructor positions being held by women (National Science Foundation, 2008a).

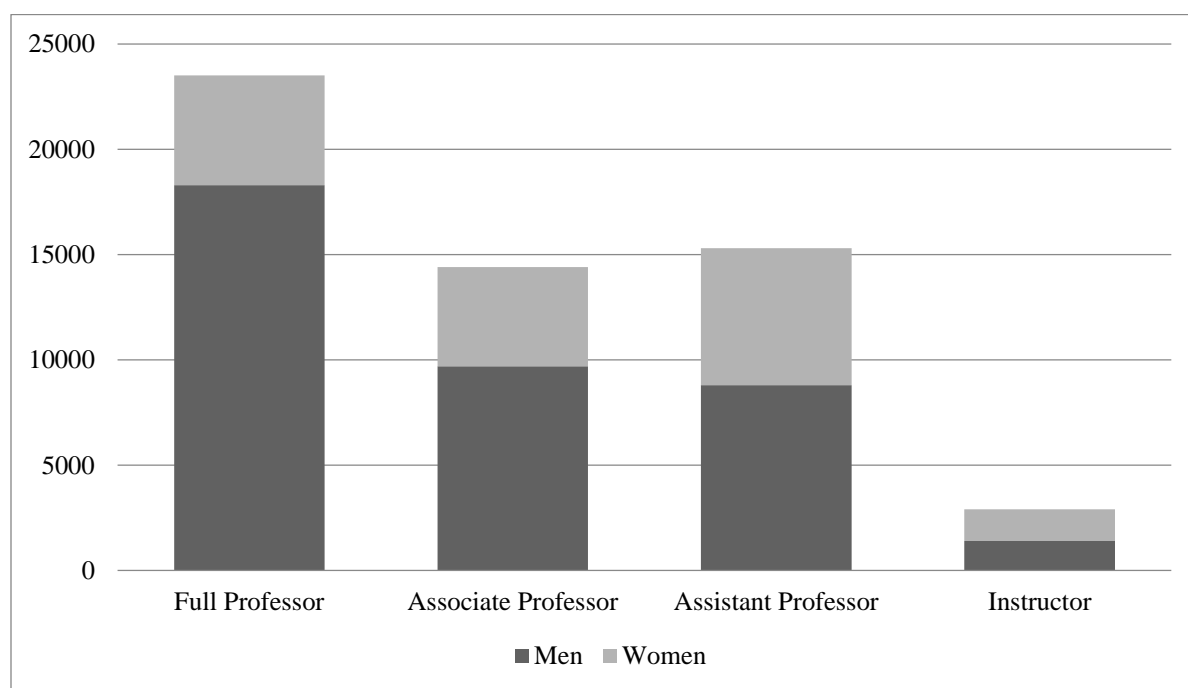


Figure 3. Representation of men and women in Biological/Agricultural/Environmental Life Sciences and related field academic faculty positions.

Out of 107 land-grant university colleges of agriculture, seven permanent and three interim dean roles are held by women as represented in this study sample. Additionally, based on the statistics mentioned in this report of men and women in faculty and leadership positions in biological/agricultural/environmental life sciences and related fields, a male faculty member is five times more likely to be chosen to serve as dean than a woman in the same position.

The participants in this study shared that they felt they lacked a sense of belonging to the existing leadership network before they were dean. The research conducted with the participants also supports the literature that suggests the notion that while many women deans never explicitly planned to become the dean, they felt they were excelling in their roles and the opportunity just happened upon them (Issac et al., 2009). Themes from the data illustrate women being approached to enter into leadership positions and then oftentimes having the self-realization that they could be effective in a leadership role.

Women administrators informally/incidentally learn leadership. The participants also substantiate the literature supporting the notion that for women deans, leadership was not learned through courses, but through mechanisms of society, as well as the identities and intrinsic drives of these individuals (Issac et al., 2009, p.149). Women deans tend to reference relationships, experiences, and ideologies as giving knowledge to their leadership practices. Only a few of the women did mention the Food Systems Leadership Institute as one formal leadership training opportunity; but most attended after they were already selected to serve as an administrator.

This study supports the notion that informal/incidental learning occurs in the workplace environment and can play a large role in how individuals learn to operate in their jobs (Eraut et al., 1998; Marsick et al., 2010; Tough, 1971/78). In the sense that formal education levels have

also been linked to the notion of measurable increased informal learning in adulthood (Livingstone, 1999), women with advanced degrees also show a higher frequency of learning intensity in their jobs (Skule, 2004). Findings from this study support that women agricultural deans and vice presidents learned leadership informally and incidentally.

Research on the ways that one learns to become a leader has been relatively sparse (Stead & Elliott, 2009). However, the work of Kempster (2006) begins to examine learning through lived experience. Findings from his study of men in the workplace conclude that formal development interventions had a relatively low level of influence on the leaders that were in his sample population. Highly ranked learning moments were found when men observe other leaders. Socially situating leadership allows us to understand the learning process as a part of the context of the learner and recognize that learning leadership is both a formal and informal process (Fox, 1997; Marsick & Watkins, 1990). This study sample is a unique contribution to understanding critical incidents within a leader's development journey because the researched population was all women.

Studies show that leadership for women tends to be more relational in nature and thus these relationships have meaning in the social environment. "Then, understanding how women leaders experience learning from a situated approach is to recognize that any woman leader's experience cannot be separated from its social context" (Stead & Elliott, 2009, p.136). Acknowledging that leadership is an informally learned and socially situated process allows for the development of models not only focused on the individual but also the context.

"With men viewed as the 'natural inhabitants' of the organizational domain while the women are 'out of place' (Ford, 2006, p.81), perhaps it is not altogether surprising that leadership development largely reflects a gendered stance" (Stead & Elliott, 2009, p.37). For

this reason, it can be argued that leadership literature has been historically designed based on masculine models of leadership. Informal/incidental learning through lived experience, as compared to formal training, plays an instrumental role in women's leadership development.

Informal and incidental learning was the main mode of knowledge gathering for the women. In each interview, the women felt confident that they were drawing on past experiences to understand how to act as an effective leader. By discussing critical incidents the women also naturally discussed what they learned as a result. The women seemed to have a direct link from the informal/incidental learning they experienced to their leadership practices, and often referenced it as a primary mode of leadership development.

Women Endured Challenges Turning Them into Opportunities for Self-Growth

Conclusion two states that women deans and vice presidents with agricultural governance responsibilities in higher education have resourcefully managed to endure difficult circumstances, withstanding very challenging situations and relationships, often turning them into opportunities for self-growth. Through each interview the women recounted many difficult circumstances and challenging situations oftentimes within the work environment. They would often then recount how they chose to respond. More times than not, the women endured the situation and discovered some sort of coping mechanism. Sometimes the women were pushed to their limits and found themselves having to stand firm for someone else, or enduring the aftermath of a decision which was out of their control. Other times the women understood that they must call in a superior to mediate the conversation and help bring order to the crisis currently at hand.

Workplace challenges. Studies indicate that women continue to be disproportionately underrepresented in top management and are paid less than men are when they do reach those

positions (Kochan, 2007). Deconstructing the barriers to women achieving upper management positions allows researchers to explore the context in which these situations are taking place. Many more times than not, discrimination based on gender is a silently embedded and accepted piece of the workplace culture (Meyerson & Fletcher, 2000). “Governmental policies, business practices, and research agendas lag behind the pace of workplace diversification” (Bierema & Cseh, 2003, p.5).

Microaggressions between colleagues or supervisors to peers can deconstruct work-based relationships in higher education (Chambers, 2011). The participants in this study substantiate the literature that suggests that many forms of microaggression can take place in such a seemingly natural way that they can be ignored within the workplace culture. The women operationalized the term microaggression, sometimes without even having the precise language to categorize what they had experienced. Words such as discrimination and harassment were often fitting, but not all of the women identified with those terms. The term microaggressions seems to fit most adequately to describe the experiences that the women had navigating the workplace culture around them while serving as an assistant, associate, full professor and/or department head.

Another issue for women serving in a role that has been traditionally held by men is sex typing of occupations. The Lack of Fit Model (Heilman, 1983) proposes that when one’s gender is incongruent with the sex type of a specific job, sex bias will occur and lead to decreased performance expectations and evaluations (Heilman, 2001). The sex type of a job is determined by two factors: the gendered characteristics believed to be required of that job and the proportion of men (or women) occupying the job (Welle & Heilman, 2005). In three cases, the women deans were serving in that role following the first ever woman dean of the college. In all of the

other cases, the women were the first of their gender to serve in the chief administrative roles for their institution. This study supports Heilman's notion of lack of fit in suggesting that the workplace culture was adjusted to interact with a leader of the male gender and which could be incongruent with the leadership persona of the new female administrator.

Learning and self-growth. Through developing their leadership persona, the women experimented with everything from their physical appearance to their email communication, based on how they internalized and learned from their experiences within the workplace culture. Research shows that when a woman exhibits mostly feminine behaviors she is perceived as likeable but sometimes inadequate for managerial responsibilities (Pichler, Simpson, & Stroh, 2008). In the same way, if a woman is perceived as masculine, she may be viewed as a better fit for a managerial role, but not as likeable and could become excluded from consideration for the position she desires (Pichler, Simpson, & Stroh, 2008). The research found in this study is also supported through notions such as the Double Bind Dilemma (Catalyst, 2007) which stands for a well-researched metaphor that describes the dilemmas of a woman in leadership. Women executives often face three major double bind dilemmas:

- 4) Extreme Perceptions: Too Soft, Too Tough, and Never Just Right.
- 5) The High Competence Threshold: Women Leaders Face Higher Standards and Lower Rewards than Men Leaders.
- 6) Competent but Disliked: Women Leaders Are Perceived As Competent or Likeable, but Rarely Both. (Catalyst, 2007, p.7)

As women are often evaluated against a masculine standard of leadership, they are many times left with unfavorable choices of how to respond, no matter how they behave as leaders (Catalyst, 2007). The women in this study understood that perceptions of others were important

and could impact the effectiveness of their leadership practices. Somehow the women were able to grow and learned how to formulate their leadership style appropriately within their context, or just so happened to be a fit within the context, in which they were chosen to lead.

In each circumstance, whatever the challenge might have been, the women were smart enough to learn, grow, and use the experience to their advantage in their next phase of career development. In two situations, women chose to remove themselves from their current position and try something different. The women were not afraid to take calculated risks which still resulted in producing an eventual upward trajectory in their careers. In these instances, the women felt like the best decision was to leave their current position and find a work environment more suited for their personalities and skills.

Women Learned How to Navigate and Change the Culture through Transformational Leadership

Conclusion three states, women deans and vice presidents with agricultural governance responsibilities in higher education have successfully learned to navigate the patriarchal culture to transcend existing norms, making dynamic impacts in their workplace environment through transformational leadership practices. The participants in this study were an elite sample of highly educated, professional women. All but two women identified themselves as white, while two were of foreign descent, speaking another language other than English, becoming United States citizens later on in life.

Transcending normal. In the new millennium, women face continuing barriers to achieve positions of leadership such as sex stereotyping of occupations and the historically patriarchal nature of the workplace leadership culture. Literature on academic deans reveals that often the deans rose to high positions early in their careers and intentionally practiced building

their leadership skills (Isaac, et. al., 2009). In the cases of these women, most of them continued their education straight through to pursue a doctoral degree and then became a full-time assistant professor. All but a few of the women are considered veterans with 25 years or more of experience working in higher education.

The women in these leadership positions are truly a minority as it relates to leadership in agricultural higher education settings. However, the deans and vice presidents seemingly developed the tools to transcend traditional boundaries, navigate the patriarchal culture, and establish rapport with senior administrators who ultimately recommended them for many of their current leadership positions. Introducing the concept of social networks as an influence on informal learning (Cross, 2007), allows dialogue centered on where women are learning and about their ability to make connections with individuals in the social network that is most beneficial to their success in the workplace (Bierema, 2005). Based on the interview data several dimensions present themselves as important in the ability of the women to transcend unspoken boundaries to leadership within the culture of higher education including: establishing a strong network of high-level advocates, practicing mirroring behavior and developing a leadership persona that works for each woman in her workplace culture.

Whether it was by intuition or the natural nature of the women to develop these skills, the women learned through lived experience and seemingly moved forward in their career trajectory to transcend the cultural expectation of a male in their leadership role. The critical incidents that the women shared often illustrated their persistence, advanced intellectual ability to think through problems and situations, and often developed sense of interpersonal sensitivity. The

sense is that these skills and connections are only developed over time. One dean responded, “Ten years,” when I asked her how long it took her to learn how to speak in order to be heard in a boardroom.

The women often referenced being “invited” or “asked” to serve as the dean or vice president of their institution. This invitation insinuates an offer of membership into the club or network of upper echelon leaders. However, even at this level, the women often felt that they still sometimes had to negotiate for the ability to gain funding for personnel or facilities, make visionary decisions such as changing the organizational structure, and also work extremely hard to gain rapport with the faculty and staff.

Transformational leadership. When questioned about their personal leadership style, the women used words most closely associated with a transformational leadership style. The women talked about their leadership mostly characterized in transformational notions of empowerment, two way communication, and people-centered management practices. The women understood that the boardroom was a different context from the breakroom, and that getting on the level of the individuals you are communicating with is the most effective way to reach the desired outcome.

Current leadership and organizational development literature is emphasizing the effectiveness of transformational leadership traits versus the transactional traits which are more closely aligned with traditionally masculine styles of leadership (Bass, Avolio, & Atwater, 1996). Empowering employees, fostering innovation, empathy, and collaborative decision making are traits more closely aligned with transformational leadership styles that tend to reflect a more feminine personality schema. Literature is supporting the use of transformational leadership traits in management because of the resulting increased effort from employees and

productivity within the organization when these strategies are employed (Bass, Avolio, & Atwater, 1996). Essentializing feminine leadership by aligning it with transformational qualities is not fully warranted either; however, recognizing that gender is a factor when creating a model for leadership development is also recognizing the personal nature of leadership and the sometimes unspoken but ever present context in which all people lead.

An overwhelming majority of leadership literature also focuses on building individual human capital while ignoring the social identity and social context and/or setting of the leader, which can be problematic, especially for women (Stead & Elliott, 2009). Throughout the years, the women's leadership paradigm has transitioned from identifying social/interpersonal characteristics of women leaders and the barriers they face to a new era of postheroic models that account for leader relationships along with fluidity in the social environment. In postheroic models, leadership is presented as a process which emerges through relationships and spheres of influence including the broader contextual conceptualizations of fields of practice (Stead & Elliott, 2009).

Practice, social process, and learning (Fletcher, 2004) are three key elements which differentiate postheroic models from previously established individualistic models of leadership. Founding principles of this model emphasize that leadership is a shared practice and that each person within the organization has a voice (Stead & Elliott, 2009). These models place an increased emphasis on identifying leadership traits which may be identified as traditionally more feminine characteristics: "empathy, vulnerability, and skills of inquiry and collaboration" which are employed within the larger social context (Stead & Elliott, 2009, p.27). Understanding that these women favor transformational leadership styles as a result of learning leadership through lived experiences connects the leader to the context in which the leadership was learned.

Implications

Theoretical implications for the findings of this study reinforce the notion of postheroic models that account for leader relationships along with fluidity in the social environment (Stead & Elliott, 2009). Themes found in women's leadership literature especially surrounding deans in higher education are reinforced. Notions of Transformational Leadership (Burns, 1978), the Lack of Fit Model (Heilman, 1983), and the Double Bind Dilemma (Catalyst, 2007) are also supported through this research. Cultural, social and psychological barriers to leadership are also reinforced through this research and given new light for exploration into the key areas found. Thought leaders in feminist theory should also take notice of the status of today's women and the difference of "equivalence" vs. "equality" supporting the notion of respecting the female gender to work in her own way to accomplish goals in a patriarchal workplace environment. Implications for practice include a call to action for higher education to use research and resources within its existing operating structures to change current practices, continuing education and development of focused coaching strategies and coping mechanisms for women who wish to pursue or are currently holding leadership roles in higher education.

Implications for Theory

Theoretical implications for the findings of this study reinforce the notion of postheroic models that account for leader relationships along with fluidity in the social environment (Stead & Elliott, 2009). Due to the personal nature of leadership, greater attention must be paid to the dimensions of the person as leader and the context of the leadership in order to understand how leadership is learned and practiced. Leaning on the influence of the social dimensions of self as an open system for curriculum design (Macagnoni, 1969), leadership literature can begin to explore the idea that the woman is much like the learner in this model, and that the "self" is

comprised of seven social properties that are influenced by the context in which the learner (or leader) is situated. Research could explore the notion of how a woman learns and practices leadership is inter-related to how the learner is able to enhance her social properties within the context of the workplace environment. Partnered with adult learning theory, a model could be constructed to more fully map the influence of past experiences and current context with the social dimensions of a woman learning leadership.

Notions of the Lack of Fit Model (Heilman, 1983), and the Double Bind Dilemma (Catalyst, 2007) are also supported through this research. As women are often evaluated against a masculine standard of leadership, they are many times left with unfavorable options of how to respond no matter how they behave as leaders (Catalyst, 2007). Each of these theories has been discussed within the context of the literature review and conclusion sections.

In addition to these theories, this study supports the notion of existing research on transformational leadership styles as important to the women's leadership context. The Theory of Transformational Leadership states that the leader/follower relationship is built upon using inspiration as a means to come together for a higher aim (Burns, 1978). As Stead and Elliot so eloquently discuss leadership models have been traditionally made based on the findings of research conducted by and on men. The findings of this study also support Stead and Elliot's notion that more research on women will enable additional insights to form on women's leadership development and activity.

Finally, now is the time for feminist thought leaders to redefine notions of feminism as it relates to women and men in the new millennium. Ideas of equality are outdated as it is widely recognized that men and women are not "equal" in the identical sum of our biological parts and psychological composition; but rather, "equivalency" or generating the same overall magnitude,

should be the desired new frame for empowering the female gender. Today's woman, understands that she has the ability to not only become a wife and a mother, but also to become educated, pursue employment, vote, run for political office, and own property. The thought that women could not do those things 100 years ago is almost laughable in today's society. However, the laughing stops when women realize that opportunity and actuality are two different domains and that research continues to show and support that the culture in which we live lacks equivalence, for not only women as compared to men, but also for people of all colors, faiths, handicaps, and orientations.

Implications for Practice

The notion that the field of higher education is a thought leader for feminine empowerment while at the same time doubling as the face of hypocrisy for creating non-equivalent workplace structures is completely offensive. As found in this research study, incivility within departments can be blatant and demeaning which results in deconstructing not only women faculty but undermining the enterprise of university operations and scholarship. Researchers in the areas of human resource and organizational development and adult education should be valued as thought leaders for designing educative spaces and thoughtful management structures beginning at the departmental level within college and university settings. Scholars should be invited to bring leadership to universities by designing management training and organizational development structures consistent with best practices and latest literature.

Academia must begin to create the climate of equivalency beginning at the grassroots level within each department. No one will do it for us and the answer lies within, all academic bodies, to spread awareness and exercise the power to act. Department heads, assistant and associate deans, deans, and campus administrators must become cognizant of workplace

structures and how each person works together to create the pieces of the puzzle that compose their workplace environment. Microinequities that take shape in the form of culturally accepted norms must be discussed. An ombudsman or skilled counseling staff could be utilized to bring together staff that is experiencing workplace issues. Action plans and professional growth plans could be formed as a result of meetings between staff.

As women, we must understand how to recognize microinequities and recognize the proper way to respond. By spreading awareness of what is happening in academia, women can gain a greater understanding of their workplace culture. As more research is completed, a curriculum designed to educate managers is a strategy that can begin at the department head level. Creating an inclusive management and leadership training focused on gender and all orientation (e.g., cultural, racial, ability level, etc.) awareness as a required course for all managers in higher education is a first step.

Purposeful education for all managers in academia can serve as a powerful catalyst for altering the status quo and can generate new knowledge discoveries within people in order to stimulate change. Historically, promotions are granted and managers are named without any type of required management training. By educating managers on a grassroots level, each faculty member will be in a better place to understand their power and positionality as a manager or leader. In addition administrators of the college should be educated and made aware of all salary, leadership and organizational structures in the departments in which they manage. College and university presidents as well as other senior campus leaders also need to undergo specialized consultations and trainings in order to understand the current context of their

institution and their leadership perspective. Including gender-based workplace education as a part of the universities' strategic plan is one idea to generate a strong emphasis on awareness and a call to action.

In a most practical sense, this study can serve as a foundation on which to educate and coach women who are entering into roles within higher education agricultural leadership. In this study, very few of the women referenced having access to any type of formal leadership training, but when they did, they often said it did have an impact on them and their leadership. However, this study revealed that the women in this sample often learned leadership by doing it, watching it and experiencing it themselves. As women in leadership roles, we must pay attention to the world around us to become students of our surroundings, supervisors and decision makers. Coaching for women in leadership has heightened in popularity and the findings from this study could be used to inform and train women on how to deal with these types of critical incidents as well as be more comfortable with developing their personal leadership style; especially in the setting of higher education.

Implications for Future Research

Researching women administrators through the foci of adult learning theory, social scientist can continue to explore and create models of leadership that are most relevant to our current paradigm filled with women in senior management roles previously held by men. Based on the participant sample and research in this study, I observed the ever changing nature of the women and the context in which they were leading. Many of the women discussed having a transformational style of leadership, but they also seemed to exhibit transactional leadership qualities. Situational leadership theory asserts that there is not a single best style of leadership but that the best leaders are simply task-relevant (Vecchio, 1987). None of these models seemed

to adequately grasp the way that these women were acting out their leadership. Within their workplace context, the women, without relinquishing their vision for the institution and personal authenticity, are practicing effective leadership by shape-shifting into the best leader for the situation. The women seem to understand how to keep their vision while maneuvering through ways of changing, even their outward appearance and behavioral norms, in order to influence their constituents.

Transfigurative leadership. Because of this distinctive change in persona as a result of informal/incidental learning, the women had almost developed the ability to become a chameleon in order to match their surroundings and become effective leaders. In a workplace filled with change as the new normal existing leadership models seem to inadequately represent the women leaders within this study. Established leadership styles are incongruent with a persons' ability to shape shift and make decisions that are best suited for the changing context and audience which they are leading (i.e., women deans of colleges of agriculture). I am proposing a new multi-dimensional model of leadership that is not merely a blending of the most highly established models but the emergence of an idea that accounts for the importance of situational context for the leader as they act. Understanding that situational context and leader discernment are important parts of leadership behavior, transfigurative leadership recognizes the ability of the leader to navigate throughout their workplace climate in an effective manner.

Defined, the word transfiguration means "a change in form or appearance" and can be thought of as an "exalting, glorifying, or spiritual change" (Merriam-Webster, 2013). In transfigurative leadership, the leader views their leadership as situational and can exhibit a change in form or appearance in order to reach the goals that are in the best interest of the individual, themselves, or the organization based on the context. Employees achieve objectives

through being individually and collectively motivated by any or all methods such as rewards, punishments, higher ideals and values instilled by the leader. Leaders who utilize a transfigurative approach have a clear vision and understand the importance of each follower to the collective outcome while placing an emphasis on their personal leadership as a changing operation within situational contexts.

Compared to transactional and transformational leadership, transfigurative leaders are able to not only think of just themselves or just the collective, but motivate followers by encouraging them to understand their individual importance to the group interest while being cognizant of the leader's self-interest and vision. Transfigurative leaders may undergo a change within themselves in order to lead within a specific context (e.g., A woman leader entering into an all-male boardroom). Below is a table adopted from basic information on transactional and transformational leadership (Bass, 1985; Burns, 1978) that I am utilizing to start the conversation on the characteristics of transfigurative leadership based on my participant sample.

Table 6

Leadership Model Comparisons

Transactional	VS.	Transformational	VS.	Transfigurative
Leadership is responsive		Leadership is proactive		Leadership is situational
Works within the organizational culture		Works to change the organizational culture by implementing new ideas		Discerns how to work with the organizational culture to stimulate a response or innovate change when appropriate
Employees achieve objectives through rewards and punishments set by leader		Employees achieve objectives through higher ideals and moral values		Employees achieve objectives through being individually and collectively motivated through rewards, punishments and higher ideals and values.

Motivates followers by appealing to their own self-interest	Motivates followers by encouraging them to put group interests first	Motivates followers by encouraging them to understand their individual importance to the group interest while being cognizant of leader-interest and vision.
Management-by-exception: maintain the status quo; stress correct actions to improve performance.	Individualized consideration: Each behavior is directed to each individual to express consideration and support. Intellectual stimulation: Promote creative and innovative ideas to solve problems.	Exhibit a clear vision and employ a collective approach to management with specialized attention to individuals as important parts of the whole.

Additional research is needed to understand more about the proposed concept of transfigurative leadership. Future study could develop an intensive taxonomy of descriptors to form a model that could be evaluated and compared to existing models within leadership literature.

Transfigurative leadership is a postheroic model where the responsibility for success is shared between the leader and key individuals who are developed as members of the management team such as associate deans and department heads. The leader could be viewed as somewhat “coach-like” in the sense that she is really working to understand the individuals she is leading on such a level as to really know how to best motivate and work with them (e.g., showing appreciation for their work, granting flexible work arrangements, giving them a challenge, or promotion opportunities). The leader understands that each action comes as a result of single, double and triple loop learning as a process of interaction with their environment. In this model, the women seem to operate in a mode of triple loop awareness, working to understand organizational and individual values, motives and beliefs about systems, even though it might not be discussed in the open every time this awareness occurs. Engaging in triple loop learning allows the leader to understand the changes that need to be made within their

leadership style in order to garner the most effective response from the individual and for the situation (e.g., adjusting their leadership persona to be more like those she is working with or aligning with a power group to gain buy-in for decisions).

Limitations

At the beginning of the design, I had planned to study the participant sample of women deans of land-grant colleges of agriculture. The nature of this sample population is one that was highly specialized and therefore restricts the generalizability of the findings across a broad population of women who do not exhibit similar characteristics. As discussed throughout this study, the number of women in leadership in agriculture across the setting of higher education is sparse. Due to the specialized nature of the women in this target sample population, generalizability for women who are not involved in agricultural disciplines could be limited. This study could be referenced when discussing women in male-dominated disciplines in higher education such as engineering or other hard sciences such as physics or chemistry. Other positions within higher education related to the social sciences or fields with roles seemingly held by more women could discuss this study in relation to a woman's experience in leadership.

Advice to Current and Future Women Leaders in Higher Education Agriculture

When reflecting on why I participate in the process of research and scholarship, it is absolutely to make a tangible difference in the lives of people and organizations to enact positive change in the world. With the afore stated, I would be remiss if I did not offer advice or recommendations to women who wish to serve or are currently serving in agricultural leadership roles based on this research study. As women, or as with all persons, we are continually defining and redefining ourselves through enacting multiple life roles that we personify each and every day. Familial influences are important to women as historically the female gender has been

placed at the center of care giving responsibilities for children or other members of the family. Women have been working since the beginning of time, even though much of this work has historically been viewed as feminine duty. However, based on this research study, establishing rapport through exemplary work, relationship building with key individuals, becoming a student of your environment, and enacting a transfigurative approach to leadership are key recommendations for success for women who wish to pursue a leadership role in this setting.

Gaining access to enter the role of dean or vice president is a difficult task, especially for women. Exemplary scholarship is the first step for women who wish to pursue these types of roles. Many of the women interviewed have won numerous awards and prizes for their research and are considered the top researchers in their field. These women still operate research labs while enacting their administrative roles. Research publications and presentations must be at the forefront of the “to do” list for any woman who desires to advance into an administrative role. Gaining notoriety in the field’s peak research journals and holding offices in professional organizations is a good way to create a name for oneself which can serve as a conversation piece for women who are networking with key individuals who are the decision makers for entry into leadership positions.

Throughout each interview, the women currently in leadership positions continued to mention that they were approached to apply for the position of leadership that they held. In this sense, these women were highly networked and supported. If women desire to pursue leadership positions, networking with key decision makers is imperative to their success. For women who wish to pursue a leadership role, being labeled as “an up and comer” is something that must be a priority. Enacting day to day exemplary work and building a strong high powered network through professional organizations and volunteering for leadership roles are strategies to expand

the network that women currently hold. In addition, being out and about around campus at events and activities is a good way to meet people and start conversations which lead to expanding one's network. Following up these conversations with handwritten notes and email check-ins are thoughtful ways to continue dialogue and develop authentic relationships.

Generationally speaking, Baby Boomer women are emerging to stand at the helm of leadership in agricultural higher education positions. In many instances, these women are the first of their gender to enact the role of dean or vice president within this setting. In these cases, there is not a feminine model of leadership to follow, but there is a history of leadership within each of these organizations. Being a student of the organizational culture in which you would like to lead or are currently leading is imperative to understand how to be successful in leadership.

One important question that all women in leadership should ask is, "Who were the individuals that held the leadership position before me and how did they interact with their environment?" This question will enable the leader to compare and contrast the differences that they may have with the former leader in relation to how they interacted with their environment. People within the organization often make assessments or assertions about the current leader based on the actions of the previous leader. Throughout the interviews, I continually heard from the interviewees, the person in the dean role before me did "x" and that the faculty responded in this certain way to me as the leader because that was how they were conditioned to respond.

As higher education organizations structures are normally established and change adverse, walking into a leadership position with a wrecking ball and deconstructing the entire organization or the individuals who are responsible for leading is not recommended. However, thoughtful planning and strategic movements (i.e., relationship building with key power

individuals over time, studying the organizational culture, understanding power) can position you as the leader to gain buy-in and wisdom from key individuals to empower yourself to serve as a respected change agent. Relationship building comes from a place of authenticity and genuine care for the persons that you are working alongside.

Women often view the world in terms of relationships, and at work, I believe that women's effectiveness in management and/or leadership lies within our innate ability to utilize the relationships that we have built to motivate and inspire people to reach a common goal. These goals, usually for the greater good of the organization, often take into consideration the talents of the individuals that we manage and the vision that the leader has for the organization. As women, employing a transfigurative leadership style will also contribute to success of the leader by enacting a situational approach that is based on the ability of the leader to shape-shift in form or appearance to serve as the most appropriate leader for the moment while staying true to the vision of the organization.

Operationalizing transfigurative leadership could appear as adapting to a male leadership persona when appropriate or even taking on a transactional nature to accomplish certain tasks. Women deans and vice presidents who were interviewed in this study often talked about the importance of being their authentic self in relation to sustaining their leadership practices. Some of the women discussed being comfortable with a more feminine leadership style, but this was often after their leadership rapport had been established. From the results of this study, it seems that women agricultural administrators could place their leadership at risk if they tend to favor a feminine persona or discuss feminine issues with individuals who are not women in the work place. Forming an inner circle of individuals to have authentic dialogue and discourse with could assist women in male-dominated settings such as agriculture to lead more effectively.

Chapter Summary

Examining the data through a critical feminist lens, the purpose of this study was to analyze interviews with a comprehensive sample of women in agricultural leadership positions, deans and vice presidents, at land-grant institutions of higher education throughout the nation about critical incidents that have inspired incidental/informal learning on their practices of leadership. Three conclusions were revealed as a result of this study. Women deans and vice presidents with agricultural governance responsibilities in higher education have:

- 1) traditionally lacked access to existing leadership networks and have learned how to lead as a student of their environment, employing informal and incidental learning strategies.
- 2) resourcefully managed to endure difficult circumstances, withstanding very challenging situations and relationships, often turning them into opportunities for self-growth.
- 3) successfully learned to navigate the patriarchal culture to transcend existing norms, making dynamic impacts in their workplace environments through transformational leadership practices.

Unlike men, who are often groomed to take on leadership roles from a young age, women in this sample did not set out in their careers with the expectation to be an administrator. Learning from lived experience in their social context was their rehearsal; leadership for these women is lived by acting as a player in a live improvisational show in their workplaces each day. Based on their instinctive reactions and instincts, developed over years of time, the women made

choices on how to lead. Research shows us that these women are unique in that they have endured established barriers that many women face when pursuing a leadership role while rising through the ranks of the organization.

Theoretical implications for the findings of this study reinforce the notion of postheroic models that account for leader relationships along with fluidity in the social environment. Themes found in women's leadership literature especially surrounding deans in higher education are reinforced. Notions of Transformational Leadership (Burns, 1978), the Lack of Fit Model (Heilman, 1983), and the Double Bind Dilemma (Catalyst, 2007) are also supported through this research. Cultural, social and psychological barriers to leadership are also reinforced through this research and given new light for exploration into the key areas found. Implications for practice include a call to action for higher education to use research and resources within its existing operating structures to change current practices, such as continuing education and development of focused coaching strategies and coping mechanisms for women who wish to pursue or are currently holding leadership roles in higher education.

Within their workplace context, the women, without relinquishing their vision for the institution and personal authenticity, are practicing effective leadership becoming the best leader for the situation. In a workplace paradigm filled with change as the new normal, transactional and transformational leadership models seem to inadequately represent the women leaders within this study. In transfigurative leadership, the leader views their leadership as situational and can exhibit a change in form or appearance in order to reach the goals that are in the best interest of the individual, themselves, or the organization based on the context at hand. As the persons that inhabit the roles of leader change, leadership literature needs to continue to create models to

enhance our understanding of the changing nature of leadership. Future research is needed to determine if transfigurative leadership is a viable model in the new millennium.

Concluding Remarks

Growing up in a small rural farming town, seven miles away from the nearest grocery store, with my mother and grandmother was fun. I remember walking the rows of my Mimi's vegetable and flower garden, shelling peas, and shucking corn for what seemed like hours. Sitting outside in the 100 degree heat on the hot asphalt driveway, capturing slugs, to put in tupperwares for my homemade bug zoo was a memorable activity. As a child, agriculture taught me about the intrigue of exploration, the values of responsibly, and high quality work.

Into my course of study within Adult Education, I began to understand that this research was a necessary step to reveal important findings concerning informal/incidental learning as it relates to women leadership in agricultural work in higher education. Each of these women deans and vice presidents were all kind enough to share their time and their stories with me. Each one of these very accomplished women is special and an absolute inspiration. It is my hope that women in male-dominated disciplines increase their network with each other to dialogue about their experiences and discuss ways to "fix" the leaky pipeline for other women who wish to enter their ranks.

Leadership is not a right; it is a privilege. Poor leaders have the power to wreak havoc on their followers and stifle the productivity of organizations. Transfigurative leadership can empower both the leader and follower to reach new heights in the context of any situation. Growing into leadership, today's women are learning, leading, and creating effective strategies to operate within the changing context of leadership.

REFERENCES

- Altheide, D. (1996). *Qualitative media analysis*. Thousand Oaks, CA: Sage Publications.
- American Council on Education. (2007). *The American college president* (3rd ed.). Washington, DC: American Council on Education.
- Anderson, K., & Jack, D. (1991). Learning to listen: Interview techniques and analyses. In S. Gluck & D. Patai (Eds.), *Women's words: The feminist practice of oral history* (pp.11-26). New York, NY: Routledge.
- Argyris, C., & Schon, D. (1974). *Theory in practice: Increasing professional effectiveness*. Oxford, England: Jossey-Bass Publications.
- Argyris, C., & Schon, D. (1978). *Organizational learning: A theory of action perspective*. San Francisco: Jossey-Bass Publications.
- Ashton, D. (1998). Skill formation: Redirecting the research agenda. In F. Coffield (Ed.), *Learning at Work*. Bristol: The Policy Press.
- Astin, H. (1984). The meaning of work in women's lives: A sociopsychological model of career choice and work behavior. *Counseling Psychologist*, 12, 117-126.
- Ayers, J., & Doak, J. (1986). Assistant/associate deans in the administrative organization of colleges of education. Retrieved from EBSCOhost.
- Bass, B. (1985). *Leadership and Performance Beyond Expectations*. New York: NY. Free Press.
- Bass, B., & Avolio, B. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage Publications.

- Bass, B., Avolio, B., & Atwater, L. (1996). The transformational and transactional leadership of men and women. *Applied Psychology: An International Review*, 45, 5-34.
- Bierema, L. (2001). Women, work, and learning. *New Directions for Adult and Continuing Education*, 92, 53-62. Retrieved from ERIC database.
- Bierema, L. (2005). Women's networks: A career development intervention or impediment?. *Human Resource Development International*, 8, 207-224.
- Bierema, L., & Cseh, M. (2000). Evaluating HRD research using a feminist research framework. *Paper presented at the Academy of Human Resource Development Conference*. Raleigh-Durham, N.C.
- Bierema, L., & Cseh, M. (2003). Evaluation ahrd research using a feminist research framework. *Human Resource Development Quarterly*, 14, 5-26.
- Bileen-Green, C., Froelich, K., & Jacobson, S. (2008). The prevalence of women in academic leadership positions, and potential impact on prevalence of women in the professional ranks. *WEPAN Conference Proceedings*. Retrieved from <http://www.ndsu.edu/fileadmin/forward/documents/WEPAN2.pdf>.
- Billing, Y., & Alvesson, M. (2000). Questioning the Notion of Feminine Leadership: A Critical Perspective on the Gender Labeling of Leadership. *Gender, Work & Organization*, 7, 144-157.
- Bisbee, D. (2007). Looking for leaders: Current practices in leadership identification in higher education. *Planning and Changing*, 38, 77-88. Retrieved from ERIC database.
- Blau, F., & Kahn, L. (2007). The gender pay gap: Have women gone as far as they can? *Academy of Management Perspectives*, 21, 7-23.

- Board of Directors Network (2010). Counting down the days until we don't count the seats: 2010 annual study of Georgia public companies women in the boardroom. Retrieved from: http://www.boarddirectorsnetwork.org/docs/2010_study.pdf.
- Boud, D., & Garrick, J. (1999). *Understanding Learning at Work*. London: Routledge.
- Brown, S., & Barbosa, G. (2001). Nothing is going to stop me now: Obstacles perceived by low-income women as they become self-sufficient. *Public Health Nursing*, 18, 364-372.
- Brown, J., & Duguid, P. (1991). Organisational learning and communities of practice: toward a united view of working, learning and innovation, *Organisation Science*, 2, 40-57.
- Butler, J. (1990). *Gender trouble: Feminism and the subversion of identity*. New York, NY: Routledge.
- Burlin, F. (1976). The relationship of parental education and maternal work and occupational status to occupational aspiration in adolescent females. *Journal of Vocational Behavior*, 9, 99-104.
- Burke, R., & Vinnicombe, S. (2005). Advancing women's careers. *The Career Development International*, 10, 165-167.
- Burns, J. (1978) *Leadership*. New York: NY. Harper & Row.
- Caffarella, R., Clark, C., & Ingram, P. (2007). Life at the glass ceiling: Women in mid-level management positions. Paper presented at the *Twenty-Seventh Annual Standing Conference on University Teaching and Research in the Education of Adults*.
- Catalyst (2007). The double bind dilemma for women in leadership: Damned if you do and damned if you don't. Retrieved from <http://www.catalyst.org/publication/83/the-double-bind-dilemma-for-women-in-leadership-damned-if-you-do-doomed-if-you-don't>.

- Catalyst (2013). Women ceo's of the fortune 1000. Catalyst. Retrieved from <http://www.catalyst.org/knowledge/women-ceos-fortune-1000>.
- Cappelli, P., & Hamori, M. (2005). The new road to the top. *Harvard Business Review*, 83, 25-32. Retrieved from EBSCOhost.
- Carter, N., & Silva, C. (2010a). Women in management: Delusions of progress. *Harvard Business Review*, 88, 19-21. Retrieved from EBSCOhost.
- Carter, N., & Silva, C. (2010b). Pipeline's broken promise. Catalyst. Retrieved from <http://www.catalyst.org/publication/372/pipelines-broken-promise>.
- Chambers, C. (2011). Candid reflections on the departure of black women faculty from academe in the united states. *Negro Educational Review*, 62/63, 233-260.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: SAGE Publications, Inc.
- Cheallaigh, M. (2001). Lifelong learning: How the paradigm has changed in the 1900s', In P. Descy & M. Tessaring (Eds.), *Training in Europe*. Second report on vocational training research in Europe 2000. Background report. CEDEFOP, Luxembourg: Office for Official Publications of the European Communities.
- Chronicle of Higher Education (2010). Job description: Dean of the college of agriculture and life sciences at the university of florida. Retrieved from: <http://chronicle.com/jobs/0000653930-01/>.
- Collins, L. (1998). Competition and contact: The dynamics behind resistance to affirmative action in academe. In Collins, L.H., J.D. Christler, & K. Quiz (Eds), *Career strategies for women in academe: Arming athena*. Thousand Oaks, CA: Sage Publications.

- Corbally, J. (1956). The critical incident technique and educational research. *Educational Research Bulletin*, 35, 57-62.
- Cotterill, P. (1992). Interviewing women: issues of friendship, vulnerability, and power. *Women's Studies International Forum*, 15, 593-606. Retrieved from EBSCOhost.
- Cross, J. (2007). *Informal learning: Discovering natural pathways that inspire innovation and performance*. San Francisco, CA: John Wiley & Sons.
- Crotty, M. (2006). *The foundations of social research: Meaning and perspective in the research process*. London, England: Sage Publications.
- Davies-Netzley, S. (1998). Women above the glass ceiling: Perceptions on corporate mobility and strategies for success. *Gender and Society*, 12, 339-355.
- Deal, J., & Stevenson, M. (1998). Perceptions of Female and Male Managers in the 1990s: Plus ça change.... *Sex Roles*, 38(3/4), 287-300.
- Domenico, D., & Jones, K. (2006). Career aspirations of women in the 20th century. *Journal of Career and Technical Education*, 22, 2, Retrieved from EBSCOhost.
- Dewey, J. (1897). My pedagogic creed. *The School Journal*. 3, 77-80.
- Dewey, J. (1938). *Experience and education*. New York, NY: Collier Books.
- Dugger, K. (2001a). Women in higher education in the United States: I: Has there been progress?. *The International Journal of Sociology and Social Policy*, 21, 118-130.
- Eagly, A., & Karau, S. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109, 573-598.
- Eagly, A., Karau, S., & Makhijani, M., (1995). Gender and the effectiveness of leaders: A meta-analysis. *Psychological Bulletin*, 11, 125-145.

- Eagly, A., Makhijani, M., & Klonsky, B. (1992). Gender and the evaluation of leaders: A meta-analysis: Correction to eagly et al. *Psychological Bulletin*, 112, 557.
- Eagly, A., & Mladinic, A. (1994). Are people prejudiced against women? Some answers from research on attitudes, gender stereotypes, and judgments of competence. *European Review of Social Psychology*, 5, 1–35.
- Egan, M. (2010). Top paid female chief executives. Msn news. Retrieved from: <http://news.in.msn.com/business/article.aspx?cp-documentid=3891989>.
- Ellingson, L. (2008). *Engaging crystallization in qualitative research: An introduction*. Thousand Oaks, California: SAGE Publications, Inc.
- Etzkowitz, H., Kemelgor, C., & Uzzi, B. (2000). Athena unbound: the advancement of women in science and technology. Retrieved from EBSCOhost.
- Ekos Research Associates. (1993). Reskilling society (phase I): Industrial perspectives. The National Survey of Employers on Training and Development Issues. Hull, Que: Human Resources Development Canada.
- Ellinger, A., & Watkins, K. (1998). *Updating the critical incident technique after forty-four years*. Retrieved from ERIC database.
- Eraut, M., Alderton, J., Cole, G., & Senker, P. (1998). Learning from other people at work, In F. Coffield (Ed.), *Learning at work*. Bristol: The Policy Press: Bristol.
- Eraut, M., Alderton, J., Cole, G., & Senker, P. (2000). Development of knowledge and skills at work, In F. Coffield (Ed.), *Differing visions of a learning society*. Bristol: The Policy Press.

- Estes, S. (2001). Preparing to be an administrator. In J. E. Bryant & B. A. Passmore (Eds.), *Administrative leadership in health, kinesiology, and leisure studies* (pp. 229-238). Dubuque, IA: Kendall/Hunt.
- Farmer, A. (2008). Feminism today: The personal is still political. *Perspectives: A magazine for & about women lawyers*, 4-7. Retrieved from EBSCOhost.
- Flanagan, J. (1954). The critical incident technique. *Psychological Bulletin*, 51, 327-358.
doi:10.1037/h0061470.
- Fletcher, J. (2004). The paradox of postheroic leadership: An essay on gender, power, and transformational change. *Leadership Quarterly*, 15, 647.
- Foucault, M. (1982). The subject and power. *Critical Inquiry*, 8, 777-795.
- Fox (1997). From management education and development to the study of management learning. In J. Burgoyne, M. Reynolds, J. Burgoyne, M. Reynolds (Eds.) , *Management learning: Integrating perspectives in theory and practice* (pp. 21-37). Thousand Oaks, CA: Sage Publications.
- Ford, R. (2006). Organizational Learning, Change and Power: Toward a Practice-Theory Framework. *Learning Organization*, 13, 495-524.
- Francis, B. (2002). Is the future really female? The impact and implications of gender for 14-16 year olds' career choices. *Journal of Education and Work*, 15, 75-88.
- Gaither, G. (2002). Developing leadership skills in academia. *Academic Leadership, The Online Journal*, 2, 1. Retrieved from:
www.academicleadership.org/leader_action_tips/Developing_Leadership_Skills.shtml.

- Gallos, J. (1989) Exploring women's development: Implications for career theory, practice, and research. In M. Arthur, D. Hall, & B. Lawrence, (Eds.), *Handbook of career theory: Perspectives and prospects for understanding and managing work experiences*, (pp. 110-32). Cambridge: Cambridge University Press.
- Glaser, B. (1978). *Theoretical Sensitivity*. Mill Valley, CA: Sociology Press.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York, NY: Aldine De Gruyter.
- Glesne, C. (2006). *Becoming qualitative researchers: An introduction*. Boston, MA: Pearson Education, Inc.
- Gluck, S., & Patai, D. (1991). *Women's words: The feminist practice of oral history*. New York, NY: Routledge.
- Gramsci, A. (1971). *Selections from prison notebooks*. London, England: Lawrence & Wishart.
- Grant Thornton (2007). Four in ten businesses worldwide have no women in senior management. Retrieved from: <http://www.grantthorntonibos.com/Press-room/2007/women-in-senior-management.asp>.
- Gray, L. (1987). Professional careers for women in industrial relations. In K. S. Koziara, M. H. Moskow, & L. D. Tanner (Eds.), *Working women: Past, present, future* (pp. 225–244). Washington, DC: Bureau of National Affairs.
- Gremler, D. (2004). The critical incident technique in service research. *Journal Of Service Research*, 7, 65-89. doi:10.1177/1094670504266138.
- Hannan, C. (2004). Women's right and empowerment: Gender equality in the new millennium. Retrieved from <http://www.un.org/womenwatch/daw/news/speech2004/CH-Texas24Oct2004.Pdf>.

- Hardin, E. (1991). The integration of women into professional personnel and labor relations work. *Industrial and Labor Relations Review*, 44, 229–241.
- Heilman, M. (1983). Sex bias in work settings: The lack of fit model. In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (pp. 269–298). Greenwich, CT: JAI Press.
- Heilman, M. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, 57, 657–674.
- Helfat, C., Harris, D., & Wolfson, P. (2007). The pipeline to the top: Women and men in the top executive ranks of U.S. corporations. *Academy of Management Perspectives*, 20, 42–64.
- Herren, R., & Edwards, M. (2002). Whence we came: The land-grant tradition – origin, evolution, and implications for the 21st Century. *Journal of Agricultural Education*, 43, 4.
- Heuer, J. (2003). Succession planning for key administrators at ivy-plus universities. *Dissertation Abstracts International*, 64, 740.
- Holloway, W., & Jefferson, T. (2000). *Doing and writing qualitative research differently: Free association, narrative and the interview method*. Thousand Oaks, CA: Sage Publications.
- Ibarra, H., Carter, N., & Silva, C. (2010). Why men still get more promotions than women. *Harvard Business Review*, 88, 80-126. Retrieved from EBSCOhost.
- InterOrganization Network (2010). Guys who get it: Business leaders who understand the value of diversity at the top. Retrieved from <http://www.boarddirectorsnetwork.org/docs/IonBrochure.pdf>.
- Isaac, C., Behar-Horenstein, L., & Koro-Ljungberg, M. (2009). Women deans: Leadership becoming. *International Journal of Leadership in Education*, 12, 135-153.
- Jalilvand, M. (2000). Married women, work, and values. *Monthly Labor Review*, 123, 26-31.

- Johnstone, J., & Rivera, R. (1965). *Volunteers for learning: A study of the educational pursuits of american adults*. Chicago, IL: Aldine.
- Karsten, M. (1994). *Management and gender: issues and attitudes*. Westport: Greenwood Publishing Group, Inc.
- Kempster, S. (2006). Leadership learning through lived experience: A process of apprenticeship?. *Journal of Management & Organization*, 12, 4-22.
- Khallad, J. (2000). Education and career aspirations of palestinian and u.s. youth. *Journal of Social Psychology*, 140, 789-792.
- Kitzinger, C., & Wilkinson, S., (1996). Theorizing representing the other. In S. Wilkinson & C. Kitzinger (Eds.), *Representing the other: A feminism and psychology reader* (pp.1-32). London, England: Sage Publications.
- Knoke, D., & Ishio, Y. (1998). The gender gap in company training. *Work and Occupations*, 25, 141–167.
- Kochan, T. (2007). Social legitimacy of the HRM profession: A U.S. perspective. In P. Boxall, J. Purcell, & P. Wright (Eds.), *The Oxford handbook of human resource management* (pp. 599–621). Oxford, UK: Oxford University Press.
- Kolb, D. (1984). *Experiential learning*. Englewood Cliffs, NJ: Prentice Hall.
- Konrad, A., Kramer, V., & Erkut, S. (2008). Critical mass: The impact of three or more women on corporate boards. *Organizational Dynamics*, 37, 145-164. Retrieved from EBSCOhost.
- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage Publications.

- Laff, M. (2009). The guiding hand: Mentoring women. *T+D*, 63, 32-35. Retrieved from EBSCOhost.
- Lafreniere, S., & Longman, K. (2008). Gendered realities and women's leadership development: Participant voices from faith-based higher education. *Christian Higher Education*, 7, 388-404. doi:10.1080/15363750802171081.
- Lave, J., & Wenger, E. (1991). *Situated learning. Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Ledwith, M. (2009). Antonio gramsci and feminism: The elusive nature of power. *Educational Philosophy and Theory*, 41, 684-697. Retrieved from EBSCOhost.
- Lewin, K. (1947). Group decision and social change. In T. M. Newcomb & E. L. Hartley (Eds.), *Readings in Social Psychology* (pp. 330–341). New York, NY: Holt, Rinehart, & Winston.
- Livingstone, D. (1999). Exploring the icebergs of adult learning: Findings of the first canadian survey of informal learning practices. *Canadian Journal for the Study of Adult Education*, 13, 49-72.
- Livingstone, D., & Ontario Inst. for Studies in Education, T. (2001). Adults' informal learning: Definitions, findings, gaps, and future research. *NALL Working Paper #21*. Retrieved from EBSCOhost.
- Macagnoni, V., & Florida Educational Research and Development Council, I.s. (1969). *Social dimensions of the self as an open system: A curriculum design. Strategies for implementation*.
- Mainiero, L. (1994). Getting anointed for advancement: The case of executive women. *Academy of Management Executive*, 8, 53–67.

- Marsick, V., & Watkins, K. (1990). *Informal and incidental learning in the workplace*. New York, NY: Routledge.
- Marsick, V., & Watkins, K. (1999). Envisioning new organizations for learning, in D. Boud and J. Garrick (eds), *Understanding Learning at Work*. London, England: Routledge.
- Marsick, V., Watkins, K., Callahan, M., & Volpe, M. (2010). Informal and incidental learning in the workplace. In M. Smith, N. DeFrates-Densch (Eds.), *Handbook of research on adult learning and development* (pp. 570-600). New York, NY: Routledge/Taylor & Francis Group.
- McGlashen, K., Wright, P., & McCormick, B. (1995). Preferential selection and stereotype effects on evaluation of female leader performance, subordinate goal commitment, and task performance. *Sex Roles*, 33, 669–686.
- Mendez, L., & Crawford, K. (2002). Gender-role stereotyping and career aspirations: A comparison of gifted early adolescent boys and girls. *Journal of Secondary Gifted Education*, 13, 96-107.
- Merriam, S. (1998). *Qualitative research and case study applications in education*. Revised and expanded from “case study research in education.” San Francisco, CA: Jossey-Bass Publishers.
- Merriam, S. & Associates (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco, CA: Jossey-Bass Publishers.
- Merriam, S., & Simpson, E. (2000). *A guide to research for educators and trainers of adults*. (2nd ed., updated). Malabar, FL: Krieger Publishing Company.
- Merriam-Webster. (2013). Transfiguration. Retrieved by <http://www.merriam-webster.com/dictionary/transfiguration>.

- Meyerson, D., & Fletcher, J. (2000). A modest manifesto for shattering the glass ceiling. *Harvard Business Review*, 78, 126–138.
- Miles, M., & Huberman, A. (1984). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications
- Minister, K (1991). A feminist frame for the oral history interview. In S. Gluck & D. Patai (Eds.), *Women's words: The feminist practice of oral history* (pp.27-41). New York, NY: Routledge
- Mishra, S., Laff, M., Jarventaus, J., & Ketter, P. (2007). Skeptic: I'm sold. *T+D*, 61, 98-101.
Retrieved from EBSCOhost.
- Morrison, A., & Von Glinow, M. (1990). Women and minorities in management. *American Psychologist*, 45, 200–208.
- Muller, J. (1978). Interest and involvement of women in university governance. *Journal of the National Association of Women Deans and Counselors*, 42, 10-15.
- Nadal, K. (2010). Gender microaggressions: Implications for mental health. In M.A. Paludi (Ed), *Feminism and Women's Rights Worldwide, 2: Mental and Physical Health* (pp.155-175). Santa Barbara, CA: Praeger.
- National Association of State Universities and Land-Grant Colleges, W. (1995). The land-grant tradition. Retrieved from ERIC database.
- National Center for Education Statistics. (2010). Table 245 employees in degree-granting institutions, by employment status, sex, control and type of institution, and primary occupation. Retrieved from http://nces.ed.gov/programs/digest/d09/tables/dt09_245.asp.

National Science Foundation (2008a). Characteristics of doctoral scientist and engineers in the united states. National Center for Science and Engineering Statistics. Retrieved from <http://www.nsf.gov/statistics/nsf13302/pdf/nsf13302.pdf>.

National Science Foundation. (2008b). Science and engineering indicators. Retrieved from <http://www.nsf.gov/statistics/seind08/>.

Nelson, D., & Rogers, D. (2004). A national analysis of diversity in science and engineering faculties at research universities. Research Report, University of Oklahoma. Retrieved from http://www.now.org/issues/diverse/diversity_report.pdf.

Nieva, V., & Gutek, B. (1981). *Women and work: A psychological perspective*. New York, NY: Praeger.

Nobel Media. (2013). Marie curie – questions and answers. *Nobelprize.org*. Retrieved from http://www.nobelprize.org/nobel_prizes/chemistry/laureates/1911/marie-curie-faq.html.

Northouse, P. (2007). *Leadership theory and practice*. (3rd ed.) Thousand Oaks, CA: Sage Publications.

Oakley, A. (1981). Interviewing women: A contradiction in terms, In H. Roberts (Ed.), *Doing feminist research*. London: Routledge and Kegan Paul.

Patton, M. (2002). *Qualitative research and evaluation methods*. 3rd ed. Thousand Oaks, CA: Sage Publications.

Penland, P. (1977). *Self-planned learning in America*. Pittsburgh: University of Pittsburgh.

Pichler, S., Simpson, P., & Stroh, L. (2008). The glass ceiling inhuman resources: Exploring the link between women's representation in management and the practices of strategic human resource management and employee involvement. *Human Resource Management*, 47, 463-479. Retrieved from EBSCOhost.

- Robbins-McNeish, N. (2007). Gender stereotyping places women executives in double binds. *Diversity Factor*, 15, 5. Retrieved from EBSCOhost.
- Sadler, G., Lee, H., Lim, R., & Fullerton, J. (2010). Recruitment of hard-to-reach population subgroups via adaptations of the snowball sampling strategy. *Nursing & Health Sciences*, 12, 369-374. doi:10.1111/j.1442-2018.2010.00541.x.
- Sagaria, M., & Dickens, C. (1990). Thriving at home: Developing a career as an insider. In K. M. Moore & S. B. Twombly (Eds.), *Administrative careers and the marketplace* (pp. 19–28). San Francisco: New Directions for Higher Education.
- Saldana, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: SAGE Publications, Inc.
- Schein, V. (2001). A global look at psychological barriers to women's progress in management. *Journal of Social Issues*, 57, 675–688.
- Schmid Mast, M. (2005). Interpersonal hierarchy expectations: Introduction of a new construct. *Journal of Personality Assessment*, 84, 284–295.
- Scolly, S., Bratt, C., & Tickameyer, A. (1997). Women and issues of gender on college and university governing boards. Paper presented at the annual meeting of the *American Educational Research Association*, Chicago, IL.
- Sczesny, S. (2003). A closer look beneath the surface: Various facets of the think-manager/think-male stereotype. *Sex Roles*, 49, 353–363.
- Sellers, N., Satcher, J., & Comas, R. (1999). Children's occupational aspirations: Comparisons by gender, gender role identity, and socioeconomic status. *Professional School Counseling*, 2, 314-317.

- Skule, S. (2004). Learning conditions at work: a framework to understand and assess informal learning in the workplace. *International Journal of Training & Development*, 8, 8-20. doi:10.1111/j.1360-3736.2004.00192.x.
- Skule, S., & Reichborn, A. (2002). Learning-conducive work. A survey of learning conditions in norwegian workplaces. Luxembourg: Office for Official Publications of the European Communities.
- Skule, S., Stuart, M., & Nyen, T. (2002), International briefing 12: Training and development in Norway', *International Journal of Training and Development*, 6, 263–76.
- Spearly, J. (2007). Women on boards lead to better governance. *BizEd*, 6, 52. Retrieved from EBSCOhost.
- Stephenson, M., & Burge, P. (1997). Eliciting women's voices: Vocational choice and educational climate for women in nontraditional occupational programs. *Journal of Vocational Education Research*, 22, 153-171.
- Spender, D. (1980). Learning to Create Our Own Knowledge. *Convergence*, 13, 1-2. Retrieved from EBSCOhost.
- Stead, V., & Elliott, C. (2009). *Women's leadership*. Great Britain, UK: Palgrave Macmillan.
- Steffen-Fluhr, N. (2006). Advancing women faculty through collaborative research networks. Proceedings of the 2006 WEPAN Conference. *Women in Engineering Programs and Advocates Network*.
- Stitt-Gohdes, W. (1997). Career development: Issues of gender, race, and class. Columbus, OH: Center on Education and Training for Employment. The Ohio State University. Retrieved from EBSCOhost.

- Sue, D., Capodilupo, C., Torino, G., Bucceri, J., Holder, M., Nadal, K., & Esquilin, M. (2007). Racial microaggression in everyday life: Implications for clinical practice. *American Psychologist*, 62, 271-286.
- Tang, N. (2002). Interviewer and interviewee relationships between women. *Sociology*, 36, 703-721. Retrieved from EBSCOhost.
- Tedrow, B., & Rhoads, R. (1998). Senior women community college administrators: Life in higher education's inner circle. ASHE Annual Meeting Paper. *Association for the Study of Higher Education*. Retrieved from ERIC database.
- Tinklin, T., Croxford, L., Ducklin, A., & Frame, B. (2005). Gender attitudes to work and family roles: The views of young people at the millennium. *Gender & Education*, 17, 129-142.
- Tolbert, P., Simmons, T., Andrews, A., & Rhee, J. (1995). The effects of gender composition in academic departments on faculty turnover. *Industrial and Labor Relations Review*, 48, 562-579.
- Tomkiewicz, J., Frankel, R., Adeyemi-Bello, T., & Sagan, M. (2004). A comparative analysis of the attitudes toward women managers in the u.s. and poland. *Cross-Cultural Management*, 11, 58-70.
- Tong, R. (2009). *Feminist thought: A more comprehensive introduction* (3rd ed.). Boulder, CO: Westview Press.
- Torbert, W. (2004). *Action inquiry. The secret of timely and transforming leadership*. New York, NY: Berrett-Koehler.
- Tough, A. (1971). *The adult's learning projects*. Toronto: OISE Press.
- Tough, A. (1978). Major learning efforts: Recent research and future directions. *Adult Education Quarterly*, 28, 250-263.

- Twale, D., & Shannon, D. (1996). Professional service involvement of leadership faculty: An assessment of gender, role, and satisfaction. *Sex Roles, 34*, 117-126.
- Twombly, S. (1990). Career maps and institution highways. In K. M. Moore & S. B. Twombly (Eds.), *Administrative careers and the marketplace* (pp. 5–18). San Francisco, CA: New Directions for Higher Education.
- Rainey, L., & Borders, L. (1997). Influential factors in career orientation and career aspiration of early adolescent girls. *Journal of Counseling Psychology, 44*, 160-172.
- Rhode, D. (2003). The difference “difference” makes: women and leadership. Stanford, CA: Stanford University Press.
- Rhodes, P. (1977). Who would be a dean? A light-hearted look at the impossibility of the task. *British Medical Journal, 1*, 953. Retrieved from EBSCOhost.
- Rosser, M., & Egan, T. (2007). CEO experiences as proteges: An interactional richness perspective. Retrieved from EBSCOhost.
- Rowe, M. (1990). Barriers to equality: The power of subtle discrimination to maintain unequal opportunity. *Employee Responsibilities and Rights Journal, 3*, 153-163.
- Ryan, M., & Haslam, S. (2005). The glass cliff: Evidence that women are over-represented in precarious leadership positions. *British Journal of Management, 16*, 81-90.
- University of Georgia College of Agriculture and Environmental Sciences. (2011). Internal student data 2011. The Office of Academic Affairs.
- U.S. Department of Labor, Bureau of Labor Statistics. (1996). The 1995 survey of employer- provided training. Washington, D.C.: U.S. Department of Labor.
- U.S. Department of Labor, Bureau of Labor Statistics. (2010). Women in the labor force: A databook. Washington, D.C.: U.S. Department of Labor.

- U.S. Department of Education (2012). The condition of education 2012. National Center for Education Statistics. Retrieved from <http://nces.ed.gov/fastfacts/display.asp?id=72>.
- Vecchio, R. (1987). Situational leadership theory: An examination of a prescriptive theory. *Journal of Applied Psychology*, 72, 444-451.
- Wahl, K., & Blackhurst, A. (2000). Factors affecting the occupational and educational aspirations of children and adolescents. *Professional School Counseling*, 3, 367-374.
- Wasserman, S., Pattison, P., & Steinley, D. (2005). Social Networks. *Encyclopedia of Statistics in Behavioral Science*. Hoboken, NJ: John Wiley & Sons.
- Watkins, K., & Marsick, V. (1992). Towards a theory of informal and incidental learning in organisations. *International Journal of Lifelong Learning*, 11, 287-300.
- Watson, C., Quatman, T., & Edler, E. (2002). Career aspirations of adolescent girls: Effects of achievement level, grade, and single-sex school environment. *Sex Roles*, 46, 323-335.
- Welle, B., & Heilman, M. (2005). Formal and informal discrimination against women at work: The role of gender stereotypes. In D. Steiner, S. W. Gilliland, & D. Skarlicki (Eds.), *Research in social issues in management* (pp. 23-40). Westport, CT: Information Age Publishers.
- Wisniewski, M. (2002). Leadership in higher education: Implications for leadership development programs. *Academic Leadership: The Online Journal*, 2.
- Retrieved from www.academicleadership.org/leader_action_tips/LEADERSHIP_IN_HIGHER_EDUCATION.shtml.

- Wood, J. (2008). Critical feminist theories: Giving voice and visibility to women's experiences in interpersonal communication. In Baxter, L. & Braithwaite, D., (Eds.), *Engaging theories in interpersonal communication: multiple perspectives*. Thousand Oaks, CA: Sage Publications.
- Wolverton, M., & Gmelch, W. (2002). *College deans*. Westport, CT: Oryx Press.
- Zambarloukos, S., & Constantelou, A. (2002). Learning and skills formation in the new economy: Evidence from greece. *International Journal of Training and Development*, 6, 240–253.

APPENDIX A

PARTICIPANT CONSENT FORM

I, _____, agree to participate in a research study titled "Informal and Incidental Learning of Women Agricultural Deans that informs their Leadership Practices" conducted by Lauren Griffeth from the Department of Adult Education at the University of Georgia (706-542-8137) under the direction of Dr. Laura Bierema, Department of Adult Education, University of Georgia (706-542-6174). I understand that my participation is voluntary. I can refuse to participate or stop taking part at anytime without giving any reason, and without penalty or loss of benefits to which I am otherwise entitled. I can ask to have all of the information that can be identified as mine returned to me, removed from the research records, or destroyed.

The reason for this study is to understand informal/incidental learning of women administrators in higher education to find out what learning has informed their practices of leadership. If I volunteer to take part in this study, I will be asked to do the following things:

- 1) Answer questions for approximately one hour about informal/incidental learning that has happened during my career and how this learning has informed my practices of leadership
- 2) The researcher may call me to clarify my information
- 3) Allow this interview to be audio recorded

The benefits for me are verbalizing informal/incidental learning experiences that may help me understand and improve my leadership practices and share this knowledge with others. The researcher also hopes to learn more about the culture of higher education and the learning that occurs for women within its ranks.

No risk is expected but I may experience some discomfort or stress talking about informal/incidental learning experiences that occurred under unpleasant circumstances throughout my career. These risks will be reduced by the researcher being sensitive to probing questions and understanding when the participant does not want to talk about negative circumstances that may have occurred in my past career development. The participant may skip questions that they do not feel that they want to answer in order to minimize discomfort.

No individually-identifiable information about me, or provided by me during the research, will be shared with others without my written permission, except to protect my welfare, or if required by law. I will be assigned an identifying number that the researcher will use to analyze my data from the interview. The data will be kept until the completion of the researcher's doctoral dissertation or until 2015 in order for the opportunity to write a paper for an academic journal. Direct quotes may be used in presentations and publications, but will be attributed to a pseudonym. The data key for the pseudonyms and interview audio recordings will be kept securely on a password protected hard drive that is kept by the researcher.

The investigator will answer any further questions about the research, now or during the course of the project.

I understand that I am agreeing by my signature on this form to take part in this research project and understand that I will receive a signed copy of this consent form for my records.

Name of Researcher
Telephone: _____

Signature

Date

Email: _____

Name of Participant

Signature

Date

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 629 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

APPENDIX B
RECRUITMENT EMAIL

Dear Recipient Name:

From the list of women agricultural deans obtained from the Association of Public Land-Grant Universities, we think that you would be a welcome candidate to participate in the study of informal/incidental learning of women agricultural deans and vice presidents. Your insight would provide valuable data surrounding how women deans of agricultural schools learn and practice leadership.

I am a Ph.D. candidate at the University of Georgia and am researching this topic for my doctoral dissertation titled *Growing into leadership: A study of the informal and incidental learning of women agricultural deans and vice presidents*. Participation would require a one hour audio recorded interview either on the phone or in person, however is most convenient. Questions would revolve around recalling critical incidents in your career and then talking about what those incidents have informed your leadership practices.

If you have any questions that you would like to discuss further, please contact me by phone at (706) 410-6463 or by e-mail at lauren1@uga.edu. Thank you for your time and consideration. I sincerely hope that you will be able to participate in this study.

Regards,

Lauren L. Griffeth
Ph.D. Candidate
The University of Georgia
394 S. Milledge Avenue, Suite 256
Athens, GA 30602
Cell: (706) 410-6463
Office: (706) 542-8137

Laura Bierema
Professor of Adult Education
The University of Georgia
405 River's Crossing,
850 College Station Road
Athens, GA 30602
Phone: 706-542-6174
Email: bierema@uga.edu

APPENDIX C
IRB APPLICATION



The University of Georgia

Human Subjects Office (HSO)

612 Boyd GSRC • Athens, GA 30602-7411

Phone: 706-542-3199 • Fax: 706-542-3360 • irb@uga.edu

DHHS Assurance No.: FWA00003901

Institutional Review Board (IRB)

HUMAN RESEARCH APPLICATION

To submit: <http://www.ovpr.uga.edu/hso/how/application>

IMPORTANT: Please respond to all the questions. Do not leave items blank; if not applicable, mark N/A. Please note that incomplete applications may result in delayed review. Click on the hyperlinks (text underlined in blue) to obtain additional information.

For Human Subjects Office Use Only

Project #: _____ Date Received: _____
Type of Review: ☐ Exempt ☐ Expedited ☐ Full Board

Section A: PROJECT INFORMATION

- Study Title:** Informal and Incidental Learning of Women Agricultural Deans that informs their Leadership Practices
- Application Type:** ☒ New Project ☐ Response to Initial Review (All revisions must be in italics or different font color.)
☐ 5-Year Renewal; Previous IRB number: _____
- Principal Investigator:** (Must be UGA faculty or senior staff. See [Eligibility to Serve as PI](#).)
Name: Laura Bierema Title: Dr.
Department Name: Adult Education
Mailing Address: 405 River's Crossing, 850 College Station Road, Athens GA 30602
Phone: 7065426174 UGA E-mail (Required): bierema@uga.edu
- Co-Principal Investigator:** (Required only if for thesis/dissertation or other student project.)
Name: Lauren Griffith Title: Ms.
Department: Adult Education
Mailing address: 1051 River Haven Lane Watkinsville GA 30677
Phone: 7065428137 UGA E-mail (Required): lauren1@uga.edu
- Anticipated Start Date:** (Must be at least 4 weeks after application is received.) 11.01.12

Section B: PROJECT FUNDING

- Funding Status:** ☐ Funded ☐ Pending ☒ No Funding
- Funding Source:** ☐ Internal Account #: _____
☐ External Funding Source: _____ OSP Proposal or Award #:
- Name of Proposal or Award PI** (if different from PI of IRB protocol): _____
- Proposal or Award Title** (if different from title of IRB protocol): _____

Section C: STUDY PERSONNEL / RESEARCH TEAM

Including the PI, identify all personnel who will be [engaged in the conduct of human research](#). **Important Note:** All researchers listed below are required to complete the [CITI IRB Training](#) prior to submission of this application. This application will be returned to PI for resubmission if training requirement has not been satisfied. To add more names, bring cursor to outside of last row, and press "enter" key.

Name	E-mail	*Institution
Laura Bierema	Bierema@uga.edu	University of Georgia
Lauren Griffith	Lauren1@uga.edu	University of Georgia

*Submit an [Individual Investigator Agreement](#) for all study personnel affiliated with an institution that does not have an assurance with the Office for Human Research Protections or OHRP (typically, local schools, private doctors' clinics).

Section D: PRINCIPAL INVESTIGATOR'S ASSURANCE

As the Principal Investigator, I have the ultimate responsibility for the conduct of the study and the protection of the rights and welfare of human participants. By affixing my signature below,

- I assure that all the information contained in this Human Research Application is true and all the activities described for this study accurately summarize the nature and extent of the proposed participation of human participants.
- If funded, I assure that this proposal accurately reflects all procedures involving human participants described in the grant application to the funding agency.
- I agree to comply with all UGA policies and procedures, as well as with all applicable federal, state, and local laws on the protection of human participants in research.
- I assure that all personnel listed on this project are qualified, appropriately trained, and will adhere to the provisions of the approved protocol.
- I will notify the IRB regarding any adverse events, unexpected problems or incidents that involve risks to participants or others, and any complaints.
- I am aware that no change(s) to the final approved protocol will be initiated without prior review and written approval from the IRB (except in an emergency, if necessary to safeguard the well-being of human participants and then notify the IRB as soon as possible afterwards).
- I understand that I am responsible for monitoring the expiration of this study, and complying with the requirements for an annual continuing review for expedited and full board studies.
- If human research activities will continue five years after the original IRB approval, I will submit a new IRB Application Form. (*Exceptions:* If the research is permanently closed to the enrollment of new participants, all participants have completed all research-related interventions, and the research will remain active only for long-term follow-up of participants; or if the remaining research activities are limited to analysis of individually-identifiable private information.)
- I understand that the IRB reserves the right to audit an ongoing study at any time.
- I understand that I am responsible for maintaining copies of all records related to this study in accordance with the IRB and sponsor guidelines.
- I assure that research will only begin after I have received notification of final IRB approval.

Signature of Principal Investigator _____ Date (mm/dd/yyyy): _____

Section E: CONFLICT OF INTEREST (COI)

1. Is there any real, potential, or perceived conflict of interest on the part of any study personnel (e.g., financial or business interest, stock or stock options, proprietary interest, inventorship, consultant to sponsor)? ☐ Yes ☒ No
2. If yes, please identify personnel and explain. **Important Note:** Please review the [UGA Conflict of Interest Policy](#). Final IRB approval cannot be granted until all potential conflict matters are addressed.

Section F: LAY PROJECT SUMMARY

Briefly describe in simple, non-technical language a summary of the study, its specific aim(s)/objective(s), and its significance or importance. **Response should be limited to 250 words and easily understood by a layperson.**

In 2009 women comprised 47% of the workforce in the United States (U.S. Department of Labor, 2010). Women now hold 15% of corporate executive positions in top companies worldwide and 3% of Fortune 500 CEO spots (Carter & Silva, 2010). Progress is occurring for women to infiltrate into executive positions, but it is happening at a glacier-like pace. If current rates of change persist, it will be nearly 300 years before women are as likely as men to become top managers in major corporations or achieve equal representation in congress (Rhode, 2003). Higher education leadership

is also traditionally male dominated setting. Through a critical theoretical framework, investigators will seek to understand the informal/incidental learning of women deans of agricultural schools that informs their leadership. Investigators will utilize qualitative methodology in the form of interview to collect data. This research addresses a gap in understanding women leaders and incidental/informal learning that has guided their practices of leadership. Also, the research will assist other women (and organizations) who wish to empower women to hold leadership positions.

Section G: HUMAN RESEARCH PARTICIPANTS

1. Provide a general description of the targeted participants (e.g., healthy adults from the general population, children enrolled in an after-school program, adolescent females with scoliosis), **and indicate the estimated total number, targeted gender, and age.** To add a row, bring cursor to outside of last row, and press "enter" key.

Targeted Population	Total Number	Targeted Gender	Specify age or age range
Women Agricultural Deans in Higher Education	10	Female	N/A

- 2. Identify the inclusion and exclusion criteria.** If two or more targeted populations, identify criteria for each.
- List inclusion criteria.** Women agricultural deans in higher education
 - List exclusion criteria.** men
- 3. If the research will exclude a particular gender or minority group, please provide justification.** The research will exclude men because it is research focused on women.
- 4. Will participants receive any incentives for their participation** (e.g., payments, gifts, compensation, reimbursement, services without charge, extra class credit)? ☐ Yes ☒ No
- If yes, please describe.** For multiple sessions, include scheme to pro-rate incentives.
 - If offering extra class credit, describe a comparable non-research alternative for receiving incentive.**

Section H: RECRUITMENT AND ELIGIBILITY OF PARTICIPANTS

- Describe how potential participants will be initially identified** (e.g., public records, private records, etc.). Participants will be identified through public records and perhaps some personal contacts.
- Describe when, where, and how participants will be initially contacted.** Participants will be contacted through phone or email after they are identified.
- Advertisements, flyers, and any other materials that will be used to recruit participants must be reviewed and approved before their use.** Check all that apply below and submit the applicable recruitment material/s.
☒ No Advertising ☐ Bulletin boards ☐ Electronic media (e.g., listserv, emails) ☐ Letters
☐ Print ads/flyers (e.g., newspaper) ☐ Radio/TV ☐ Phone call ☐ Other (please describe)
- Describe any follow-up recruitment procedures.**
- Describe how eligibility based on the above inclusion/exclusion criteria will be determined** (e.g., self-report via a screening questionnaire, hospital records, school records, additional tests/exams, etc.).

Section I: RESEARCH, DESIGN, METHODS AND PROCEDURES

1. **Describe the research design and methods of data collection.** I will use a qualitative research design, including interviews. Before I begin, I will explain the study to the participants and ask them to sign a consent form. The interviews will be taped by an audio recorder.
2. **If applicable, identify specific factors or variables and treatment conditions or groups (include control groups).**
3. **Indicate the number of research participants that will be assigned to each condition or group, if applicable.**
4. **Describe in detail, and in sequence, all study procedures, tests, and any treatments/research interventions. Include any follow-up(s).** *Important Note: If procedures are long and complicated, use a table, flowchart or diagram to outline the study procedures from beginning to end.*
5. **Describe the proposed data analysis plan and, if applicable, any statistical methods for the study.** My plan for data analysis is to transcribe the interviews and field notes and create codes. I plan to generate any findings by looking at these codes and use thematic analysis techniques.
6. **Anticipated duration of participation.**
 - a. Number of visits or contacts: 2
 - b. Length of each visit: 15mins 60mins
 - c. Total duration of participation: 1hr 15 mins

Section J: DATA COLLECTION INSTRUMENTS

List and describe all the instruments (interview guides, questionnaires, surveys, etc.) to be used for this study. Attach a copy of all instruments that are properly identified and with corresponding numbers written on them. To add a row, bring cursor to outside of last row, and press "enter" key.

Number	Instrument	Brief Description	Identify group(s) that will complete
1	Interview Guide	3 guiding questions	All participants

Section K: RISKS AND BENEFITS

1. Risks and/or discomforts

Describe any reasonably foreseeable psychological, social, legal, economic or physical risks and/or discomforts from all research procedures, and the corresponding measures to minimize these. *Important Note: If there is more than one study procedure, please identify the procedure followed by the responses for both (a) and (b).*

- a. **Risks and/or discomforts.** It might be difficult for some participants to talk about uncomfortable social situations where informal or incidental learning occurred.
- b. **Measures to minimize the risks and discomforts to participants.** I plan to be sensitive to those questions and not press into things that make participants uncomfortable as not to cause any emotional distress.

2. Benefits

- a. **Describe any potential direct benefits to study participants. If none, indicate so.** *Important Note: Please do not include compensation/payment/extra credit in this section, as these are "incentives" and not "benefits" of participation in research; any incentives must be described in Section G.4.* Participants might enjoy sharing with someone what informal/incidental learning has occurred during their career.
- b. **Describe the potential benefits to society or humankind.** Perhaps other women (or organizations) can learn from the stories of the women in leadership. Incidental and informal learning can guide future practice of organizations who work with women in STEM fields.

3. Risk/Benefit Analysis

- a. **Indicate how the risks to the participants are reasonable in relation to anticipated benefits, if any, to participants and the importance of the knowledge that may reasonably be expected to result from the study (i.e., How do the benefits of the study outweigh the risks, if not directly to the participants then to society or humankind?).** Risk are very minimal for participants. Sharing this information can be very valuable for other women and organizations who wish to have women in leadership positions.

4. Sensitive or Illegal Activities

a. Will study collect any information that if disclosed could potentially have adverse consequences for participants or damage their financial standing, employability, insurability, or reputation (includes but not limited to sexual attitudes, preferences, or practices; HIV/AIDS or other sexually transmitted diseases; use of alcohol, drugs, or other addictive products; illegal conduct; an individual's psychological well-being or mental health; and genetic information)?

No

b. If yes, explain how the researchers will protect this information from any inadvertent disclosure.

5. Reportable Information

a. Is it reasonably foreseeable that the study will collect or be privy to information that State or Federal law requires to be reported to other officials (e.g., child or elder abuse) or ethically might require action (e.g., suicidal ideation, intent to hurt self or others)? No

b. If yes, please explain and include a discussion of the reporting requirements in the consent document(s).

Section L: DATA SECURITY AND FUTURE USE OF INFORMATION

1. Data Security

Check the box that applies.

☐ **Anonymous** – The data and/or specimens will not be labeled with any individually-identifiable information (e.g., name, SSN, medical record number, home address, telephone number, email address, etc.), or labeled with a code that the research team can link to individually-identifiable information.

☐ **Confidential** – The responses/information may potentially be linked/traced back to an individual participant, for example, by the researcher/s (like in face-to-face interviews, focus groups). **If necessary, provide additional pertinent information.**

☐ **Confidential – Indirect identifiers.** The data and/or specimens will be labeled with a code that the research team can link to individually-identifiable information. If the data and/or specimens will be coded, describe below how the key to the code will be securely maintained.

☐ **Paper records will be used.** The key to the code will be secured in a locked container (such as a file cabinet or drawer) in a locked room. The coded data and/or specimens will be maintained in a different location.

☐ **Computer/electronic files will be used.** The key to the code will be in an encrypted and/or password protected file. The coded data file will be maintained on a separate computer/server.

☐ **Other (please specify), or provide additional pertinent information.**

☒ **Confidential – Direct Identifiers.** The data and/or specimens will be directly labeled with the individually-identifiable information.

☐ **Paper records will be used.** The information will be secured in a locked container (such as a file cabinet or drawer) in a locked room.

☒ **Computer/electronic files will be used.** The information will be stored in an encrypted and/or password protected file.

☐ **Other (please specify), or provide additional pertinent information.**

If "Confidential" is marked, please answer all the following:

Explain why it is necessary to keep direct or indirect identifiers. So that member checks can be used to verify data collected during the interview process.

Identify who will have access to the individually-identifiable information and/or the key to the code. Laura Bierema and Lauren Griffith.

☐ **Public.** Information will be individually-identifiable when published, presented, or made available to the public.

2. Future Use of Information

If individually-identifiable information and/or codes will be retained after completion of data collection, describe how the information will be handled and stored to ensure confidentiality. *Check all that apply.*

☒ **All data files will be stripped of individually-identifiable information and/or the key to the code destroyed.**

☐ **All specimens will be stripped of individually-identifiable information and/or the key to the code destroyed.**

☒ **Individually-identifiable information and/or codes linking the data or specimens to individual identifiers will be retained. If this box is checked, describe:**

a. Retention period. Until completion of the dissertation or until 2015.

- b. Justification for retention. **I would like to retain this data, in order to have access to the information that will inform this doctoral study. Additionally, I would like to have the ability to write an article or paper for an academic journal.**
- c. Procedure for removing or destroying the direct/indirect identifiers, if applicable.
- ☐ Audio and/or video recordings (if applicable) will be transcribed/analyzed and then destroyed or modified to eliminate the possibility that study participants could be identified.
- ☒ Audio and/or video recordings (if applicable) will be retained. **If this box is checked, describe:**
- a. Retention period. **Until completion of the dissertation or until 2015.**
- b. Justification for retention. **I would like to retain this data in order to have access to the information that will inform this doctoral study. Additionally, I would like to have the ability to write an article or paper for an academic journal.**
- ☐ Other (please specify), or provide additional pertinent information.

Section M: CONSENT PROCESS

Important Note: The IRB strongly recommends the use of consent templates that are available on the IRB website to ensure that all the elements of informed consent are included (per 45 CFR 116). If more than one consent document will be used, please name each accordingly.

- ☒ **The PI is attaching a copy of all consent documents that participants will sign.**
- ☐ **The PI is requesting that the IRB waive requirement to document informed consent.** A signed consent form may be waived if one of the following criteria is met, **check the box that applies.**
- ☐ 1. The only record linking the participant and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each participant will be asked whether the participant wants documentation linking the participant with the research, and the participant's wishes will govern; or
- ☐ 2. The research presents no more than minimal risk of harm to participants and involves no procedures for which written consent is normally required outside of the research context.

The consent script or cover letter that will be used in lieu of a consent form is attached. (Choose YES or NO)

- ☐ **The PI is requesting that the IRB approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent set forth in 45 CFR 116, or waive the requirement to obtain informed consent.** An informed consent may be waived if the IRB finds that all of the following have been met:
1. The research involves no more than minimal risk to the participants;
 2. The waiver or alteration will not adversely affect the rights and welfare of the participants;
 3. The research could not practicably be carried out without the waiver or alteration; and,
 4. Whenever appropriate, the participants will be provided with additional pertinent information after participation.

Provide justification for requesting a waiver.

Describe how, where, and when informed consent will be obtained from research participants (or permission from parent/s or guardian/s and assent from minor participants), if applicable. By contacting the researcher by email or telephone, the participants agree to meet the researcher for an electronically recorded face to face interview. The form will be presented to the participants at the beginning of the interview session.

Section N: VULNERABLE AND/OR SPECIAL POPULATIONS

1. Check if some or all of the targeted participants fall into the following groups. **Important Note:** Some targeted populations require compliance with additional Subparts and the completion of an Appendix or of specific section (see last column).

Population Type	Required to Complete
<input type="checkbox"/> Pregnant women, neonates, or fetuses.....	Appendix for Subpart B
<input type="checkbox"/> Prisoners.....	Appendix for Subpart C
<input type="checkbox"/> Minors	
<input type="checkbox"/> Mentally-disabled/cognitively-impaired/severe psychological disorders	
<input type="checkbox"/> Physically-disabled	

- ☒ Terminally ill
☐ Economically/educationally-disadvantaged
☐ A specific group based on religion, race, ethnicity, immigration status, language, or sexual orientation
☐ UGA Psychology Research Pool/Other UGA students/employees
☐ Other (please describe)
2. Explain justification for including the group(s) checked above in this particular study.
3. Is there a working relationship between any researchers and the participants (e.g., PI's own students or employees)?
 No
 a. If yes, please describe.
4. Describe any additional safeguards to protect the rights and welfare of these participants and to minimize any possible coercion or undue influence. For example, amount of payment will be non-coercive for the financially disadvantaged, extra-careful evaluations of participants' understanding of the study, advocates to be involved in the consent process, or use flyers to recruit participants instead of directly approaching own staff or students.

Section O: COLLABORATIVE PROJECT OR OUTSIDE PERFORMANCE SITE

Check one of the two boxes below:

- ☐ This project does not involve any collaboration with non-UGA researchers or performance in non-UGA facilities.
☐ This project involves collaboration with non-UGA researchers or performance in non-UGA facilities (e.g., local public school, participants' workplace, hospital). *If this box is checked, list all sites at which you will conduct this research. Attach authorization/permission and/or current IRB approval. Checkboxes below are not clickable so place "X" before or over the box. To add a row, bring cursor to outside of last row, press "enter" key, and copy/paste the previous cells.*

Name of Institution	Location (County/State/Country)	Authorization/permission letter and/or current IRB approval.	
		<input type="checkbox"/> Attached	<input type="checkbox"/> Pending
		<input type="checkbox"/> Attached	<input type="checkbox"/> Pending

IMPORTANT NOTE: If none of the following applies to your research, this is the END of the application form.

Section P: METHODS AND PROCEDURES THAT REQUIRE ADDITIONAL INFORMATION

Check all that apply. **Important Note:** The items listed below are **NOT** an inclusive list of methods and procedures that may be used in research studies. Some procedures require the completion of an Appendix or of specific sections (see last column).

- | Method/Procedure | Required to Complete |
|---|----------------------|
| <input checked="" type="checkbox"/> Student research (For student's thesis/dissertation/others) | Section Q (below) |
| <input type="checkbox"/> Deception, concealment, or incomplete disclosure | Section R (below) |
| <input type="checkbox"/> Internet research | Section S (below) |
| <input type="checkbox"/> Blood sampling/collection | Section T (below) |
| <input type="checkbox"/> Clinical trial (Drugs, biologics, or devices) | |
| <input type="checkbox"/> Genetic analyses | |
| <input type="checkbox"/> Data/Tissue repository | |
| <input type="checkbox"/> HIPAA (Protected health information) | |
| <input type="checkbox"/> DXA/X-RAY | |
| <input type="checkbox"/> MRI/EEG/ECG/NIRS/Ultrasound | |
| <input type="checkbox"/> Other (please describe) | |

Section Q: STUDENT RESEARCH

Important Note: The IRB recommends submission for IRB review only after the appropriate committee has conducted the necessary scientific review and approved the research proposal.

1. This application is being submitted for: ☐ Undergraduate Honors Thesis ☒ Doctoral Dissertation Research
☐ Masters Thesis Research ☐ Other (please describe)
2. Has the student's thesis/dissertation committee approved this research? ☒ Yes ☐ No

Section R: DECEPTION, CONCEALMENT, OR INCOMPLETE DISCLOSURE

1. Describe the deception, concealment, or incomplete disclosure; explain why it is necessary, and how you will debrief the participants. **Important Note:** The consent form should include the following statement: "In order to make this study a valid one, some information about (my participation or the study) will be withheld until completion of the study."
2. Debriefing Form is attached. ☐ Yes ☐ No; If no, please explain.

Section S: INTERNET RESEARCH

If data will be collected, transmitted, and/or stored via the internet, the level of security should be appropriate to the level of risk. Indicate the measures that will be taken to ensure security of data transmitted over the internet. Check all that apply.

- ☐ A mechanism will be used to strip off the IP addresses for data submitted via e-mail.
☐ The data will be transmitted in encrypted format.
☐ Firewall technology will be used to protect the research computer from unauthorized access.
☐ Hardware storing the data will be accessible only to authorized users with log-in privileges.
☐ Other (please describe), or provide additional pertinent information.

Section T: BLOOD SAMPLING / COLLECTION

If blood will be collected for the purpose of this research, please respond to all the following:

1. Route/method of collection (e.g., by finger stick, heel stick, venipuncture):
2. Frequency of collection (e.g., 2 times per week, for 3 weeks):
3. Volume of blood for each collection (in milliliters):
4. Total volume to be collected (in milliliters):
5. Are participants healthy, non-pregnant adults who weigh at least 110 pounds? (Choose YES or NO)
 - a. If no, indicate if amount collected will exceed the lesser of 50 ml or 3 ml per kg in an 8-week period and if collection will occur more frequently than 2 times per week.
6. Will participants fast prior to blood collection(s)? (Choose YES or NO)
 - a. If yes, describe how informed consent will be obtained prior to fasting.

APPENDIX D

IRB APPROVAL

PROJECT NUMBER: 2013-10308-0

TITLE OF STUDY: Informal and Incidental Learning of Women Agricultural Deans that informs their Leadership Practices

PRINCIPAL INVESTIGATOR: Dr. Laura L. Bierema

Dear Dr. Bierema and Ms. Griffeth,

The University of Georgia Institutional Review Board (IRB) has reviewed and approved your above-titled proposal through the exempt (administrative) review procedure authorized by 45 CFR 46.101(b)(2) - Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless (i) the information obtained is recorded in such a manner that human participants can be identified, directly or through identifiers linked to the participants; and (ii) any disclosure of the human participants' responses outside the research could reasonably place the participants at risk of criminal or civil liability or be damaging to the participants' financial standing, employability, or reputation.

Your approval packet will be sent by mail. Please remember that any changes to this research proposal can only be initiated after review and approval by the IRB (except when necessary to eliminate apparent immediate hazards to the research participant). Any adverse events or unanticipated problems must be reported to the IRB immediately. The principal investigator is also responsible for maintaining all applicable protocol records (regardless of media type) for at least three (3) years after completion of the study (i.e., copy of approved protocol, raw data, amendments, correspondence, and other pertinent documents). You are requested to notify the Human Subjects Office if your study is completed or terminated.

Good luck with your study, and please feel free to contact us if you have any questions. Please use the IRB number and title in all communications regarding this study.

Regards,

Megan

Megan E McFarland, M.S.

IRB Coordinator, Human Subjects Office

624 Boyd Graduate Studies Research Center

University of Georgia, Athens, GA 30602

[706.542.0798](tel:706.542.0798) (phone) | [706.542.3360](tel:706.542.3360) (fax)

meganmcf@uga.edu

<http://www.ovpr.uga.edu/hso/>

APPENDIX E

CRITICAL INCIDENT INTERVIEW QUESTIONS

Lauren Griffeth

9/25/12

**Growing into Leadership: The Informal and Incidental Learning of
Women Agricultural Deans and Vice Presidents**

Interview Questions:

- 1) Tell me about yourself:
 - family and their occupations, hometown, college attended
- 2) How did you come to the decision to pursue your career?
- 3) Take me back to a critical incident in your career. Please describe the incident fully (before, during, after the event). What did you learn from it?
- 4) Can you tell me about another critical incident in your career? Please describe the incident fully (before, during, after the event). What did you learn from it?
- 5) Can you tell me about another critical incident in your career? Please describe the incident fully (before, during, after the event). What did you learn from it?
- 6) Are there any other ways that your leadership style has been influenced in a non-formal way?
 - What did you learn?
 - How has that impacted your leadership?
- 7) What does the future hold for you?
- 8) Is there anything else you would like to share

APPENDIX F

LAND-GRANT INSTITUTIONS



United States Department of Agriculture
Cooperative State Research, Education, and Extension Service

Land-Grant Colleges and Universities

