

Women in Agricultural and Extension Education: A Minority Report



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Abstract

Women in agricultural education at the secondary level are significantly under-represented, comprising only 14.6 percent of the total population. The evolution of women in the field of agricultural and extension education is not well documented. Knowledge about women who have pioneered positions in agricultural education provides valuable information for upcoming generations of female educators. The purpose of this descriptive study was to create a profile of women currently involved in agricultural and extension education at the post-secondary level. A questionnaire was sent to a census of women with teaching responsibilities listed in the 2001 AAAE directory. In establishing a profile, women in this study possess similar characteristics as their male counterparts in relation to job satisfaction, personal demographics and types of subjects taught. However, few women reported that other women served as their role models or that they, themselves, were serving as mentors to young female faculty members. Additionally, although women indicated a high level of satisfaction with their current job, more than two-thirds felt they had experienced barriers related to gender. Most common barriers cited were: lack of acceptance from peers and students; inequity related to status and benefits, balancing work and family and a lack of strong role models who accept both males and females.

Introduction

The human psyche seems to be ever striving for improvement, always seeking a higher level of achievement. Maslow noted that once the basic needs are met, we climb the ladder of more complex needs, until we reach a level that meets all of our inborn abilities. This is true for both male and female individuals (Maslow, 1970). Women seeking to climb the ladder of achievement in non-traditional fields often experience unique challenges to reaching the pinnacle.

Women accounted for 46% of the labor force in 1997 compared to 29% in 1950. As the face of the American labor force continues to change, more interesting facts are uncovered. For example, 90% of male executives under 40 are fathers. Conversely, only 35% of female executives under 40 are mothers (National Multicultural Institute, 1997). Another phenomenon observed is reference to the mythical "glass ceiling" first labeled in 1986. Two Wall Street Journal reporters coined the phrase in reference to the invisible barrier that blocks women from top jobs (Catalyst Report, 1993). Barriers inhibiting women in nontraditional fields are complex and inter-related. Often women do not receive appropriate education and training, and are provided limited information about opportunities in the field. In addition, limited role models, unsupportive family and friends and society's vision of traditional female roles pose as ongoing obstacles (GenderWatch, 2001).

Currently the US Department of Labor lists over 110 nontraditional occupations for women. Nontraditional is defined as any occupation where one gender comprises 25% or less of the total employed (USDOL, 2001). In 1998, Camp (2000) reported women comprised only 16.0 % of secondary level agricultural education teachers. At the university level female agricultural and extension educators make 14.7 % of the reported faculty in the American Association of Agricultural Educators Directory.

The Cooperative Extension Service (CES) was born with the Smith-Lever Act in 1914 and designed as a partnership between the U. S. Department of Agriculture and the land-grant universities (Higher Education Resource Network, 2001). While addressing sustainable agriculture, researches at Iowa State University surveyed agricultural and renewable natural resource agents in a 12 state area in the north-central region of the United States. This population reported 89.5% of the respondents were male (Jayaratne et al., 2001). An analysis of 1996 CES

professional staffing data found in the USDA personnel subsystem indicated women and individuals who are culturally diverse are significantly under represented in the Cooperative Extension System. This was found to be true at all levels of senior management, in all regions of the country, in rural and urban areas and by length of service and tenure (USDA, ECOP - USDA, 1997). It is also important to note that women agents have historically been involved in the home economics and related sectors while men gravitated to agricultural related areas.

The April 1987 issue of *The Agricultural Education Magazine* featured *Women in Agricultural Education* as the focus. One article notes that one of the hurdles faced by the female agriculture instructor was the feeling of being alone. "Regardless of where I go, I am predominately around men...this not only deals with vocational agriculture instructors, but also in the classroom..." (Does, 1987). Even with the passage of the non-discrimination legislation, reality as experienced by women involved in agricultural and extension education dictates that legislation does not mandate cultural change. Thomas (1991) suggests that those who try to force today's reality into yesterday's management can only jeopardize the viability of that enterprise. He concludes that diversity is a commitment to all employees regardless of race or gender. Diversity is about empowering whoever is in the workforce; it is not an attempt at preferential treatment.

Legislation and societal norms do not always work in harmony, especially when they are in conflict with cultural norms. An example of lack of harmony might be reflective of the experience of women in nontraditional fields like agricultural education. The top three barriers facing women in agricultural education at the secondary level are acceptance by peers and other males in the agricultural industry, balancing family and career and acceptance by administrators (Foster, 2001). Barriers facing women and other minorities in extension include lack of commitment from senior managers and university administration, resistance of some clientele groups to work with staff from diverse backgrounds, and lack of specific goals and targets for attaining a diverse workforce (USDA, ECOP-PODC, 1997). If women have experienced these barriers at entry to mid-level positions in agricultural and extension education, the question becomes "Why do they attempt to move forward?"

In a traditionally male dominated field, like agricultural education, the concept of the "glass ceiling" is a real and dominant force. According to a 1999 survey by Catalyst, the barriers to women's advancement as seen by successful women included: 1) male stereotyping and preconceptions about women, 2) exclusion from informal networks of communications, and 3) lack of significant experience (Catalyst, 2001). Also, artificial barriers based on

attitudinal bias often prevent qualified women from reaching their potential. Due to the late entrance of women into the field of agricultural education there have been very few role models for women who advocate advancement to higher education levels. Young women entering the field need to feel that their hard work and educational fortitude has not been completed in vain. Determining a profile of women in post-secondary agricultural education will provide needed background for constructing environments that will lead to their continued success.

The evolution of women in the field of agricultural and extension education is not well documented. Knowledge about women who are leading the way in agricultural education provides valuable role model information for upcoming generations of female educators.

The primary goal of this study is to create a profile of women involved in secondary agricultural and extension education at the post secondary level. In addition, this study sought to describe unique challenges/barriers experienced by women in the field. Specific research objectives for this study were to:

1. Describe women on selected personal and professional characteristics.
2. Describe the educational background and work experiences of subjects.
3. Identify perceived barriers/challenges experienced as a female agricultural educator
4. Identify level of satisfaction with current position
5. Describe experiences and roles as both a mentor and mentee in agricultural education.

Methods

This descriptive study sought to develop a profile of women in the agricultural and extension education at the post-secondary level. Both quantitative and qualitative methods were used. The population for this study was a census (N = 66) of women with teaching responsibilities listed in the 2001 Directory of the American Association of Agricultural Educators.

The instrument created by the researchers contained six sections designed to address the objectives of the study. Section One included open ended and categorical questions about the educational and professional background of the subject. Section Two sought information related to subject's current professional status. Sections Three and Four addressed roles as mentors and mentees within the profession as well as any perceived barriers and challenges that might have been experienced as a female educator. Section Five used both open ended and categorical items to gather demographic information about the subjects. Section Six provided the opportunity to share thought and comments about their experiences.

Women in Agricultural

Face and content validity were assessed using a panel of experts in research/statistics, secondary teacher education and agricultural and extension education. Minor changes were made in the wording of some items. Reliability was assessed using a test-retest procedure with 22 women who were listed in the 2001 Directory of the American Association of Agricultural Educators but did not have teaching responsibilities. Thirteen (60.0%) responded. A minimum agreement of 85 percent on each of the questions was set a priori. No statements, questions or subcategories were changed.

Data were collected between March and May 2001 following a modified Dillman's (1978) procedures for a mail questionnaire. Instruments were coded with an identification number to track and follow up with non respondents. The first packet mailed contained the instrument, an incentive and a postage paid return envelope. Subjects were also given the opportunity to complete and submit the questionnaire electronically. Two complete mailings were administered. Telephone interviews were conducted with a random sample of 20% of the nonrespondents using the entire questionnaire as a guide. Data from these interviews were compared to data from completed questionnaires. No differences were found to exist and the results were generalized to the target population (Miller & Smith, 1983). The final usable response rate was 80.0% (N = 53).

Descriptive statistics were used to summarize quantitative data; frequencies, percentages, and measures of central tendency and variability. Qualitative data were summarized and organized into general conceptual themes.

Results and Discussion

Objective 1: Describe women on selected personal and professional characteristics.

A profile of women in agricultural education at the secondary level indicates that the majority are married (64.2%), or divorced, widowed or separated (20%). Only eight of the respondents (15.1%) reported never having been married. Almost 60% of women responding had children. Ages of women varied greatly. Sixteen women (30.2%) indicated they were 35 years of age or younger. Forty-one percent (22) of the women were between the ages of 36 and 50 and the remaining 25.3 percent were 51 or older. Ethnicity reported was predominately Caucasian (92.5%). The remaining respondents were equally distributed between Hispanic and African-American. Time spend on family-related activities varied greatly. The greatest amount of time was reported in the domestic (housework) category with an average of 8.8 hrs followed by recreation (5.5 hrs) and the other category in which respondents listed items like sleeping and home renovations (3.9 hrs). The least

amount of time spent per week was on school related activities (self and children) with an average of 1.5 hours per week.

Academic appointments by women in post secondary positions in agricultural education emphasize teaching. Only 34.0% of respondents had any official appointment time committed to research (through Agricultural Experiment Stations) while approximately 26% of respondents had appointments with the Cooperative Extension Service. The most commonly held professional rank was assistant professor (35.8%). Salary ranges varied greatly with the largest number of respondents (30.2%) reporting an annual salary of over \$70,000. The next largest group (28.3%) made between \$45,000 and \$59,000 annually.

The largest percentage of respondents (37.7%) reported teacher preparation or leadership (37.7%) as their primary responsibilities. Areas least reported were adult education (17.0%) and Research Design (17.0%). Courses taught varied greatly with 56 different courses identified in the "other category."

Twenty-nine respondents (54.7%) reported advising graduate students for an average of 2.3 hours per week, while 62.0% (32) reported advising undergraduate students for an average of 5.0 hours per week. On average faculty advised nine graduate students and 29 undergraduates.

Other activities including teaching classes were reported as the activity in which most individuals spent their work time. Preparing for classes and conducting research followed these. Sixty percent (N = 31) of the respondents indicated that job responsibilities included supervision of students in intern experiences.

Objective 2: Describe the educational and work background of subjects.

Educational degrees and backgrounds leading to current employment varied greatly. Bachelor of Science degrees were most commonly received in Agricultural Education (24.5%), followed by Home Economics (22.6%) and Animal Science (15.1%). Master of Science/Arts degrees were most commonly in Agricultural Education (41.5%) followed by Home Economics (13.2%). Agricultural and Extension Education was the largest area in which PHD/EDD degrees were received with 41.5% followed by Adult Education (17.0%) and Vocational Education and Education with 15.0%. Fifty-five percent of those responding indicated that they had previously been members of either 4-H or FFA. Of the two organizations, more respondents had been 4-H members. In addition, 60.0% reported ag-related work experience prior to entering the field of education. Prior to their current position at a post-secondary institution, 60.0% of the respondents indicated that they had taught at the high school or middle school level. The average

number of years reported as working in post-secondary education was 11.8 years.

Objective 3: Identify perceived barriers/challenges experience as a female educator

Women were asked if they had experienced any barriers that were a result of gender. Sixty-four percent responded positively. Specific barriers identified included lack of acceptance from peers and students, inequity in terms of status and benefits (salary, promotion), and balancing work and family.

Although anyone with a family and a career suffers the challenge of meeting the demands of both their family's needs and the obligations of the job, women face more complex physical issues of pregnancy and childbirth. The realities of the possible health concerns in the role of a potential mother are quite different than those of the potential father. Some comments suggest an undercurrent of fear that because of potential health concerns, pregnant women will not be accepted by their male peers.

I am still putting off starting a family - NO FEMALE in our department has had a child while working here. Some have children, but were not working in the department through pregnancy. I fear that there is a view that women are not as "productive" before, during and for a while after pregnancy.

Would like to have a family, but can't seem to find a man willing to put up with me - a woman with a PhD isn't all that common to describe - also if I have a child - who would raise him/her? I fear day care.

Many comments focused on acceptance and perceived value. It is not enough to be valued for your ability, true value is shown is both verbal and more concrete forms, and women in agricultural and extension education are not sure "where they stand" with their colleagues and administrators.

I feel that as a woman, I need more education and need to accomplish more quality work than male counterparts to receive equal (or less) recognition for the work I do. I have an assistant who is a man, and people, new acquaintances, will automatically defer to him in meetings when I should be their primary contact - I need to establish my credentials and gently let these people know that I'm the one in charge, not the male. Men question my qualifications all the time.

I think as a total profession of ag ed, including secondary, there are still perceptions that women will not do as good a job as men. This can affect how students view us as being part of the profession, especially in our own state. It also affects how we might work with teachers in our state. I also know that within my department on campus, it appears that the input of women is valued less than the male faculty.

Told because I had a husband with a good job, I (dept. head) don't need to waste a promotion on you.

Subjects were also asked if they had made any personal sacrifices in order to reach their current

level of professional achievement. Eighty-three percent (N = 44) indicated they did make personal sacrifices for their careers. However, when asked if they would do it again, only 56.6% said yes, four percent said no and the remaining 40.0% were undecided. Although opinions varied regarding the degree of sacrifices made, most believed they did have to make hard choices. Many women noted incidences that spoke of the need for vast amounts of personal fortitude in order to remain in their chosen profession, for example:

Spending time with my children. However, they have received benefits from my being at the University. Only time will tell I almost forgot, husband left me because of my position, not enough time to do everything.

I supported myself through my doctoral degree program. I supported my young son and I was divorced and unemployed. I lived meagerly on my savings and supported my son and myself with no child support.

My house is always dirty! I have made a point to make time for my kids I have one closet in my office with nothing but their clothes, toys and a pillow and blanket for naps. They seem happy with the situation. I am having a problem at the moment with a rather sticky situation - there is a great job in another state (my dream job actually) and I think I have a good chance at it. My husband, however, is not at all happy because there is not a position for him at this time. I guess it's the old idea that men are supposed to get the good jobs and their wives will follow them, now the tables are turned. It's not a fun time...

Objective 4 - Identify level of satisfaction with current position

Overall women in post-secondary institutions in agricultural education were satisfied with their current position, and overwhelmingly (85.0%) would encourage others to follow their career path (see Table 1).

Many women provided positive and supporting comments about the belief that the work they do is not only important but that they are making a valuable contribution to the profession, for example:

I find great satisfaction working with students at this level, also I feel there is a tremendous need for females to participate in research and teach out students primarily because they will offer a different perspective than our male counterparts.

Women do make a difference in agriculture. Our voices need to be (not only) heard but listened to. A woman's perspective to ag is unique and worthy of serious consideration.

It is really a good situation; the hours are many, but flexible, and I think I'm making a difference in the way our future teachers think. It's nice to be able to

Women in Agricultural

Table 1 Satisfaction with current job

Level of Satisfaction	frequency	percent
Very Satisfied	19	35.8
Satisfied	26	49.1
Neutral	6	11.3
Dissatisfied	1	1.9
Ready to quit	1	1.9

have a positive impact on the future of such a great program as ag ed.

However, not everyone agreed and one respondent made the following statement,

There are many, many other professional opportunities for young women today with fewer barriers and more advantages.

Objective 5: Describe experiences and roles as both a mentor and mentee in agricultural education

Awareness of other women in agricultural and extension education in the same AAAE region was high. Eighty-three percent of the respondents indicated that they were aware of other women in the profession, however, while some of the respondents felt that women faculty in agricultural and extension education were supportive, the support was also considered to be rather unintentional and non-formal, such as getting together at professional meetings for short discussion. None of the participants indicated that they had formal mentoring relationships with women in the field. As one faculty member noted:

It seems as a group in this profession we do well to encourage each other. I feel there have been several women in ag ed who have offered encouragement, mostly without their knowing, they have done so by being role models for those of us early in our career.

Other participants agreed that there are several women in the field who have served as role models, but that women in agricultural and extension education really have, "few strong role models, and few allies who accept both males and females."

This lack of apparent formal mentoring also has led to discouragement and a sense among some participants of not always knowing how to "act" around others in order to be accepted. As one participant related, I had a male advisor who told me I should go into ag curriculum or something like that rather than becoming a university professor because "all women in ag ed are real b____'." Numerous other instances discouraging to women were reported. One participant commented, "Some women in higher ed have to fight to get there."

This same woman felt the fighting spirit kept some female faculty members from mentoring junior females in the profession because that survival instinct intuitively makes them "seem threatened by others who are newcomers." Participants also noted the lack of both male and female mentors for young women entering the field and lamented that the disparity in numbers of males versus females creates problems when trying to see help and advice from male colleagues:

(I am in a) very male dominated department. Men offer little or no help, show little concern for the well-being of females - Seem to tolerate us, but that's about all.

My male counterparts do not know how to mentor a younger female. They could use a workshop on mentoring

Summary

At many levels, women in post-secondary agricultural education possess similar characteristics as their male counterparts. They are satisfied with their jobs; age and salary ranges vary; they are predominately one ethnicity; and they teach a wide range of subjects with an emphasis on teacher preparation and communications. Educational and work background for the majority followed a traditional route, with the most degrees at all levels in agricultural education or a related area. However, a non traditional finding is that several bachelor's and masters degrees were in home economics. The U.S. Department of Labor (2001) defines nontraditional as any occupation where a gender comprises 25% or less of the total employees. A 1996 staffing report for the Cooperative Extension System reports women and minorities as significantly under-represented at all levels (1996, USDA-ECOP). Women in agricultural education at the secondary level are under represented comprising only 14.6 percent of the total population. After 75 years or existence, many questions arise to why this phenomenon exists. Is it because women got a late start in entering the discipline? Are the perceived barriers too much to try and overcome? Is balancing a career and a family more difficult in this profession than others? These questions and others deserve further investigation. Positive role models, mentors, and mentoring have long been documented as important elements in career development and transition. Few women reported that other women served as their role models or that they, themselves were serving as mentors to young female faculty members. Additional research identifying explanations would

be beneficial. Is it related to the small number of women currently in the profession? Many women are the only female faculty member in their department. Could lack of mentoring be related not only to small numbers but to geographic distances? Or are there other factors?

Perception is reality. Women responding to this study reported experiencing specific barriers as a result of gender. These barriers are consistent with those previously identified in other disciplines as well as agricultural education (Catalyst Report, 1993; GenderWatch, 2001; Williams, 2001, and Foster, 2001). Awareness and communication are essential. Barriers (perceived or real) can not be addressed unless they are first made aware of and agreed that they exist. One person's reality may not be another's. If not addressed, the barriers identified by women in this study can ultimately lead to conflict, job dissatisfaction and disharmony. As educators we may need to educate ourselves about the perceived barriers and collaboratively develop strategies to overcome.

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