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Career Perceptions of Women Faculty in Colleges of Agriculture

Barbara E. Cooper and Janet L. Henderson

Abstract

This research effort was the first national study to focus specifically on women faculty in colleges and agriculture. A representative sample of 218 women agricultural faculty was selected to receive a questionnaire focusing on career satisfaction and professional development. A 72% response rate was achieved. To gather anecdotal information, personal interviews were conducted with 15 of the women. Many of the women identified a relationship between their childhood years and their current career choice. Personal interest and encouragement from others influenced the women to enter their field of study. Most of the women chose an academic career because they enjoy teaching and being with students. An overwhelming majority of the women indicated that they derive a great deal of personal satisfaction from their career. Balancing professional and personal responsibilities was a challenge for most of the women.

Introduction

Few researchers have closely examined the career perceptions of women working in colleges of agriculture. Those researchers choosing to study women faculty primarily examine sex discrimination, sex-role stereotyping, and sex biases (Butler & Marzone, 1980). These studies focus on the problems and obstacles women face who work in academic or scientific careers.

Other investigators examine career development and satisfaction. Some current research compares men and women in terms of career development. Hopkins (1984) describes the conventional path men follow to achieve success in scientific careers. These men obtain a Ph.D. at a recognized school, obtain a tenure-track appointment at a major university, do research, obtain grants, serve on committees, teach, and continue up the ladder until they become full professors. Many women, however, do not follow this conventional

career progression because of childbirth or family moves based on a spouse's career development. (Hopkins, 1984).

Other researchers compare men and women in academia in terms of professional development and quality of life. Lovano-Kerr and Fuchs (1982) found that there are many similarities in men's and women's viewpoints and career aspirations. Almost all of these researchers found that non-tenured men and women face insecurities, pressures, and a sense of isolation. Regarding women of all ages and professions, some general data do report that they are satisfied with their lives and work (Campbell, Converse & Rodgers, 1976; Campbell, 1981). No specific information is available on the perceptions of career development and satisfaction of women agricultural faculty.

Purpose and Objectives

One of the main purposes of the study was to provide descriptive data on career perceptions for a sample of women faculty in colleges of agriculture at U.S. Land-grant universities. The study was designed to investigate the following research objectives:

- (1) to describe the professional and personal characteristics of women faculty in colleges of agriculture at U.S. land-grant universities;
- (2) to describe the current job status of women faculty in colleges of agriculture at U.S. land-grant universities;
- (3) to determine perceptions of career entry held by women faculty in colleges of agriculture at U.S. land-grant universities;
- (4) to determine perceptions of career development and networking held by women faculty in colleges of agriculture at U.S. land-grant universities;
- (5) to determine perceptions of career satisfaction held by women faculty in colleges of agriculture at U.S. land-grant universities;
- (6) to determine perceptions of career challenges held by women faculty in colleges of agriculture at U.S. land-grant universities; and

Cooper resides at 527 Calvert Lane, Lafayette, IN 47905 and Henderson is an assistant professor in the Department of Agricultural Education, The Ohio State University, 204 Agricultural Administration Building, 2120 Fyffe Road, Columbus, Ohio 43210.

- (7) to determine the relationships among perceptions of career satisfaction and the variables of age, salary range, academic rank, tenure status, marital status, agricultural discipline, and number of years in current position.

Methodology

For purposes of this study, women faculty were defined as faculty members in land-grant colleges of agriculture with academic, tenure-accruing appointments in the following nine disciplines: animal science, crop and soil science, agricultural economics/rural sociology, agricultural engineering, natural resources/forestry, biological sciences, horticulture, agricultural and extension education, and food science/animal nutrition.

Stratified random sampling techniques incorporating the 70 land-grant universities were employed to obtain a representative sample of 218 women. A research questionnaire, designed specifically for use in this study, contained two sections on career perceptions. These perceptions were measured on a six-point Likert scale varying from firmly agree to firmly disagree. A series of open-ended questions followed. Content validity of the questionnaire was established by a panel of experts consisting of agricultural education faculty, college administrators, and women faculty in the biological/physical sciences at The Ohio State University. Reliability coefficients (Cronbach's alpha) of .71 and .90 were obtained for the Likert-type scales.

During the first week of April 1986, a cover letter, questionnaire, and self-addressed, stamped envelope were mailed to the women in the sample. One hundred and fifty-seven women responded to the questionnaire, yielding a 72% response rate.

During November 1986 to April 1987, personal interviews were conducted with 15 of the women at the land-grant universities in Ohio, Indiana, Kentucky, Michigan, Pennsylvania, and West Virginia. These women were selected from the original sample by identifying women who represented the various academic ranks, disciplines, ages, and marital status of the target population.

Results

Characteristics of Women Faculty

The 157 women represented all nine academic disciplines. Twenty-three percent of the women were faculty members in the crop and soil science discipline, 15% were in the animal sciences, 14% in horticulture, 12% in agricultural economics/rural sociology, 12% in the food sciences, 12% in the biological sciences, 8% in natural resources, 3% in agricultural and extension education, and 1% in agricultural engineering.

The average age of the women was 39 years, with a range of 27 to 67 years. Ninety-five percent of the women were white, non-Hispanic. Eighty-one percent had a salary between \$30,000 and \$45,000. Eight

percent of the women earned less than \$30,000. Two women earned more than \$60,000 per year in non-administrative positions.

Sixty percent of the women were married, and 42% had children. The average number of children was two. Twenty-seven percent of the women scientists had never been married. One half (52%) of the women were raised in the metropolitan area, while 16% spent their childhood on a farm.

Current Position

Of the women faculty, nine out of 10 had a doctoral degree. One half (52%) of the women were assistant professors, 32% were associate professors, and 16% were full professors. The women in the sample had been in their current position for an average of five years, although the range was from one year to 31 years. Fifty percent of the women had been in the current positions for three years or less.

Forty-seven percent of the women indicated they have tenure and that receiving tenure had taken an average of six years. More than two-thirds of the women were on 12-month academic appointments.

The women said they worked in academic departments with an average of 24 faculty members and with an average of three women faculty per department. Thirty-five percent reported that they are the only woman in their department.

Career Entry

Several of the women involved in the personal interviews expressed surprise that they are working in their current field. One woman said she had "no confidence to pursue a four-year degree," so she first obtained an associate degree. Another woman said she "made 10 changes in various fields before deciding on an area of specialization."

Several of the women felt there was a direct relationship between their childhood years and their career choice. One woman remembers growing up in an area where the environment was polluted. "I became interested in water quality at a very young age. Now, I'm an agricultural engineer and work in the environmental sciences." A woman entomologist agreed that her childhood experiences affected her career choice: "As a child, I was interested in rock and insect collecting and bird watching. From the time I was 7 years old, I knew what I wanted to do."

When the women were asked what influenced them to enter their field of study, the two most frequent responses were personal interest and encouragement from others. One woman said she had "always enjoyed science but couldn't stand the sight of blood. Plants seemed like a good alternative for my biochemistry interest, and my advisor kept me in the field." Encouragement to pursue graduate education came from a variety of people. The majority of the women said a university faculty member had provided the stimulus needed to consider and continue doctoral study. One woman recalled, "My university professor gave me a sense that I could achieve my goals; he had faith in my

abilities." Several women said their high school science teacher motivated them to a scientific career. Other women said their mothers had been most influential in cultivating their careers. One woman remembered, "My mother taking me to the science fairs each year and allowing me to have a lab at home when I was young."

Most of the women said they chose an academic career because they enjoy teaching. "It has been incredible to be able to mold a mind," said one teacher/scientist. "It is my heritage to society. Bricks and mortar will crumble, but a molded mind will endure." Another professor said, "I feel that an academic career is the most privileged job possible."

Freedom to pursue research interests was also a reason several women chose an academic career. Many felt a career in government or industry was restricting because "there is no freedom to choose research topics."

Career Development/Networking

In the personal interviews, many of the women felt their career was well planned. One woman offered this advice, "I had a very well-planned career pattern, which is unusual. Women feel the pull between career and family and marriage. Life evolves. Go with what looks good, and don't feel like a career will tie you in forever."

A few of the women felt their career was not well planned. One woman said she had always considered her husband's career first. Another said she simply chose the path of least resistance. Still another woman said, "I think I had a certain amount of luck. There is a method to the madness. Try to be in the right place at the right time."

Many of the women responding to the questionnaire said if they could begin their professional career again, they would do nothing, or very little, differently. Another group of the women would have trained at a better college, and some wished they had started their careers earlier.

Several women responded that networking was a positive part of their professional career development. One woman said, "Networking is an aid during promotion and tenure, but there aren't many women far enough along to give support in my career." Another woman said, "Networking has been important both personally and professionally. It takes time to build contacts, but career-wise you can't survive without it. Networking helps to make you feel normal. Otherwise you can feel really alone and odd." One scientist said, "Networking definitely aided my professional growth, but I shy away from women's groups. I think they hurt my career. Instead, I establish my own network."

Not all of the women agreed that networking had helped them to grow professionally. One woman said that in her field there is a group of strong-willed women who overshadow the others. "They are abrasive and give us a bad name. I make my own niche that is right

for me." Another said, "I don't use professional colleagues very well. The women's network has not been professionally helpful, but it is personally rewarding."

Career Satisfaction

Ninety-three percent of the women responding to the questionnaire agreed that they derive a great deal of personal satisfaction from their career. Sixty percent said their professional career is the most important part of their lives, and 88% of the women would recommend an academic career for young women interested in agriculture. Comments about career satisfaction included:

- "My work allows me the lifestyle I want."
- "The material I study is intrinsically interesting and important."
- "My career drives me—challenges me."
- "I enjoy working with people in a position of influence as a role model."

When asked in the personal interview what they want to be known for in their profession, six of the women said, "a good teacher." Four of the women wanted to be known for their research contributions. Many of the women said they had benefited in their personal life because of their careers. The women had gained self-confidence, independence, friendship, a better lifestyle, and personal satisfaction. Comments included:

- "I've gained status. The money allows me to travel and have other opportunities I wouldn't have otherwise."
- "I've gained tremendous satisfaction seeing students' growth and success as well as my own growth."
- "I've gained recognition for the quality of my research work."

Several of the women indicated that they were especially satisfied with a university career. They enjoyed working with students and having the opportunity to pursue their own research interests. Comments included: "When compared to business and industry, the university is a more free, challenging and idea-oriented environment."

Career Challenges

Increasingly, most working women share one problem: the constant pressure to balance home, family, and work (Hoeflin & Bolsen, 1985). When asked about the most challenging aspect of their current job, most women said time management. Other women said they are the "token female" on too many committees and that they cannot balance these responsibilities with teaching and research. Others found meeting their personal and family needs as well as their professional duties and ambitions to be very difficult. One woman said, "I lost my first marriage after 10 years. I was married to a non-scientist, a traditional male. I had to devote my time to my career, and our paths diverged." Another woman said, "Being single is tough. I haven't been able to keep a relationship because of my career. I move frequently

because of work, and I haven't found a man who will move with me. I need someone who can handle my career commitment."

However, 71% of the women responding to the questionnaire said they can balance their professional career with their personal life. One woman said, "I haven't made any tremendous sacrifices. I have a family and home. I had to put things off. You can have it all but not at the same time." Another said her husband helps her by reading proposals and papers and that she combines her career with her personal life.

Relationships Among Perceptions of Career Satisfaction and Selected Variables

There were negligible to low correlations among perceptions of career satisfaction and the variables of number of years in current position ($r = -.15$), marital status ($r = .14$), academic rank ($r = .06$), agricultural discipline ($r = .04$), tenure status ($r = .03$), and age ($r = .01$).

Summary

The data suggest the importance of childhood experiences in affecting the career choice of the women. Encouragement from parents and teachers appears to have a positive effect on the women's decisions to pursue an academic career. Researchers cite the importance of teachers', counselors', and parents' attitudes toward science class-work as being crucial factors affecting girls in science (Matyas, 1985). Although most of the women felt their career was well planned, their career patterns do not necessarily follow the conventional path described by Hopkins (1981). The woman in the personal interviews remarked repeatedly that they had definite career goals and a sense of purpose and direction in planning their career. Networking appeared to have a positive influence on most of the women's careers. The women were not isolated from the other members in their academic discipline. They appeared to be well integrated into their profession, and several of the women held leadership positions in national professional organizations. However, several of the women mentioned what they perceive as a negative effect of women's networks. All of the women in the personal interviews were aware of support groups for women on their campus, but they did not necessarily perceive these groups to be particularly valuable from a professional standpoint.

The majority of the women were satisfied with the career choice. Many of the rewards gained from their career tended to be of an intrinsic nature: self-confidence, security, independence, personal satisfaction. Time management did not seem to be an unusual response to the most challenging aspect of their current job. The women were attempting to coordinate their professional time among teaching, research, and service responsibilities and to balance their personal time between family and individual needs.

This study describes the role models available to young women entering undergraduate and graduate programs in agriculture. Moreover, the study profiles women working today in colleges of agriculture at U.S. Land-grant universities. This information will aid the women agriculturalists in realizing they are a part of a dynamic, successful group of faculty.

Future researchers could investigate literature on career satisfaction and its relationship to women agricultural faculty. Other studies might compare the career perceptions of women and men agricultural faculty. Also, researchers could question how a career in agriculture uniquely shapes women's personal and professional experiences.

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