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ABSTRACT

The status of women faculty in colleges and universities is considered. While there has been increased hiring of women on college faculties, women faculty members still lag behind men in rank and salary, even when differences in fields, institutions, and postdoctoral experience are considered. Women presently constitute about 24 percent of the full-time instructional faculty in higher education. Most of the growth in the proportion of women faculty can be attributed to the hiring of individuals under the age of 30 to fill untenured positions. Only 46 percent of women faculty have tenure, compared to 72 percent of men faculty. Women faculty, on the average, receive 17.5 percent less in salary. One of the reasons given for the low percentage of women gaining tenure and the declining number of women full professors is the relatively low number of women who received doctorates before 1970. Once appointed to tenure-track positions, women faculty climb the academic ladder more slowly than men. Since teaching, research, and institutional service are all important factors in the evaluation of faculty for promotion and salary increases, it is necessary to determine if male and female faculty differ in the amount of time they spend doing those things. There is, for instance, a considerable difference between the teaching loads of full-time male and female faculty: women more often are involved in teaching. The evidence about the publication rates of male versus female faculty seems conflicting; however, even when the publication rates of academic women and men are identical, men are promoted more rapidly. The individual's professional visibility and service to the institution as factors often considered for advancement also are addressed. (SW)

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FINDINGS

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Women Faculty: Development, Promotion, and Pay

by Ruth B. Ekstrom

Recent efforts to bring about equity have increased the hiring of women on college faculties.

Women faculty members, however, still lag behind men in rank and salary, even when differences in fields, institutions, and postdoctoral experience are taken into account.

Women presently constitute about 24 percent of the full-time instructional faculty in higher education. While the proportion of women faculty has increased slightly in recent years, most of this growth can be attributed to the hiring of individuals under the age of 30 to fill untenured positions. Only 46 percent of women faculty have tenure, compared to 72 percent male faculty (1). In addition, the percentage of tenured faculty who are women has actually declined in recent years, going from 27.4 percent in 1974-75 to 25.1 percent in 1976-77 (see Chart No. 1).

Women faculty, on the average, receive 17.5 percent less in salary. Salary differences persist even when academic field, type of institution, and rank are taken into account. For example, the average male professor at a private university receives \$28,589 while the average female full professor receives \$25,219. Although the salary differences tend to be less at the lower ranks, there is no type of institution, academic field, or faculty rank where

the average salaries of female faculty equal or exceed the male average (2).

One of the reasons given for the low percentage of women gaining tenure and the declining number of women full professors is the relatively low number of women who received doctorates before 1970. Women received about 15 percent of the doctorates in the 1930s. By the 1950s, this figure had declined to 10 percent. During the 1970s, the proportion of doctorates granted to women has increased sharply, reaching 24.9 percent in 1976; however, most of these recent doctorates are not yet eligible for tenure-level positions.

Women Used to Face Discrimination in Hiring

The proportion of doctorates awarded to women is increasing in all academic areas. However, there are considerable differences in the proportions across fields. Forty-five percent of all doctorates awarded to women are in the fields of anthropology, biology, education, the health sciences, psychology, and the Romance languages. Other fields in which women receive more than 25 percent of the doctorates are home economics, art history, Germanic languages, comparative literature,

social work, English, speech, library sciences, linguistics, classics, microbiology, and sociology. The fields that attract the most women are those already glutted with Ph.D.'s. There is still a particularly severe lack of women in academic fields such as mathematics, where women are 11 percent of all doctoral faculty, and chemistry, where women are 13 percent of the doctoral faculty, and in engineering and the physical sciences.

Until recently, the recruitment process was a serious barrier to the employment of women faculty members. Job criteria often assumed the traditional white male life-style and career ladder. Moreover, women job candidates were frequently viewed in terms of sex-role stereotypes suggesting that they are less intelligent than men, that they do not have a real commitment to a career, and that they are irresponsible and emotionally unstable.

Various institutional policies also limited the recruitment of women. Anti-nepotism policies, which seem to be disappearing, prevented academic women from being employed in the same department or institution as their husbands. Policies preventing institutions from hiring their own graduates often limited job opportunities for women who were not able to relocate.

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Women also were often affected by societal expectations and, as a result, sometimes undervalued themselves and their abilities. Married women, for instance, may have been led to expect that their husbands' careers should be more important than their own. The evidence suggests that academic women have been more likely than equally able men to seek jobs in the less-prestigious institutions, in the lower ranks, or in marginal types of employment. For example, women have been more likely to seek jobs in two- or four-year colleges than in research universities.

Tenure Decisions Still Reflect Sexist Bias

Despite these problems, there appears to have been a sincere effort in recent years at affirmative action in the recruitment of women faculty. Both Bayer and Astin (3) and Carter and Ruhter (4) reported that, by the mid-1970s, evidence of sex discrimination in first-job placement and initial salary had largely disappeared. However, the evidence also suggests that, in most academic fields, women with doctorates receive a disproportionately small percentage of tenure-track appointments and may be more likely to take postdoctoral appointments and other alternative positions.

Once appointed to tenure-track positions, women faculty climb the academic ladder more slowly than men. For example, among men and women who received Ph.D.'s between 1960 and 1969, men are two to three times as likely to have become full professors as women. The lag in achieving tenured status varies somewhat with the academic field, being least in the social sciences and greatest in the physical sciences. According to recent data compiled by Lilli Hornig for the National Academy of Sciences' Commission on Human Resources, "The proportion of men achieving tenure has exceeded that of women by about 5 to 20 percent among recent doctoral cohorts."

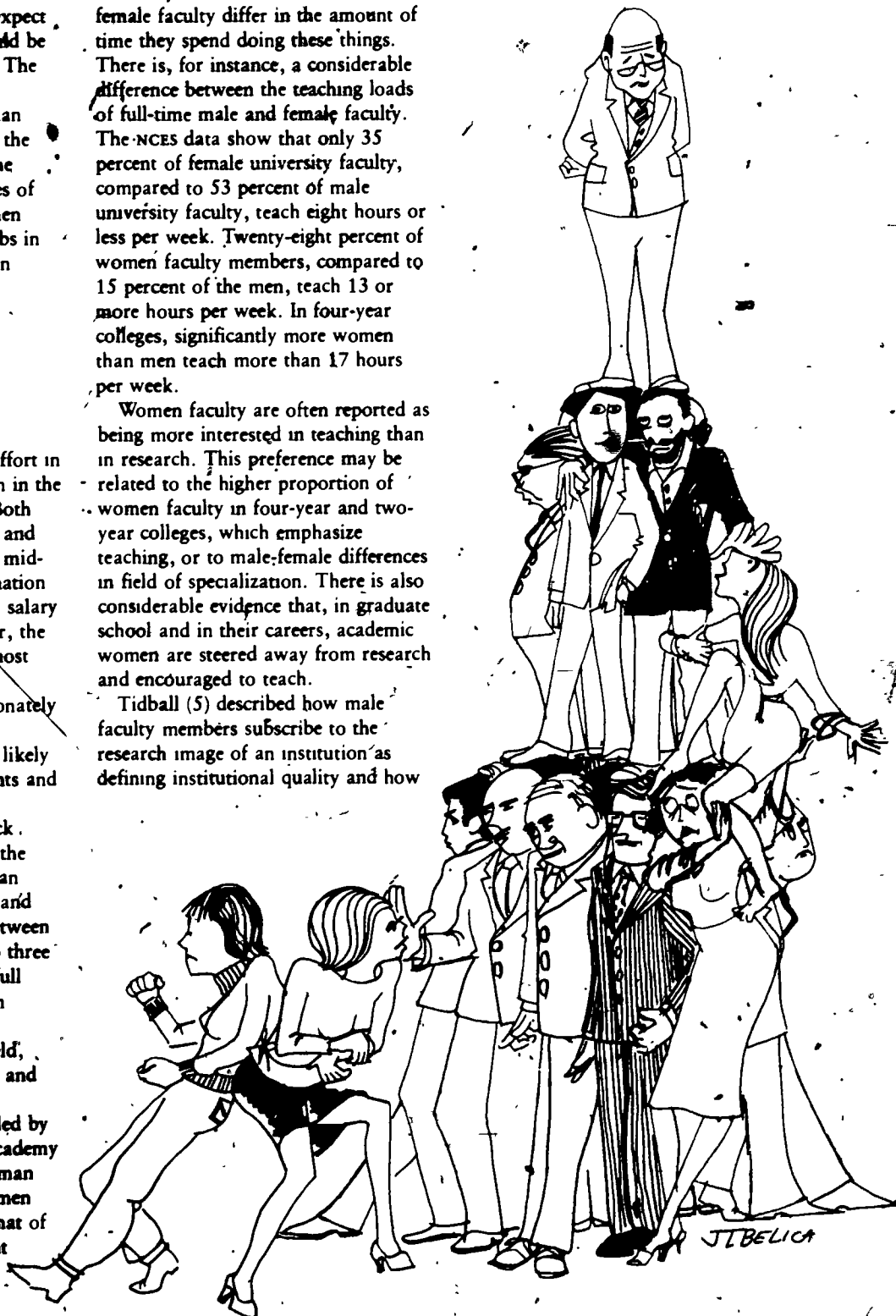
Since teaching, research, and

institutional service are all important factors in the evaluation of faculty for promotion and salary increases, it is necessary to determine if male and female faculty differ in the amount of time they spend doing these things.

There is, for instance, a considerable difference between the teaching loads of full-time male and female faculty. The NCES data show that only 35 percent of female university faculty, compared to 53 percent of male university faculty, teach eight hours or less per week. Twenty-eight percent of women faculty members, compared to 15 percent of the men, teach 13 or more hours per week. In four-year colleges, significantly more women than men teach more than 17 hours per week.

Women faculty are often reported as being more interested in teaching than in research. This preference may be related to the higher proportion of women faculty in four-year and two-year colleges, which emphasize teaching, or to male-female differences in field of specialization. There is also considerable evidence that, in graduate school and in their careers, academic women are steered away from research and encouraged to teach.

Tidball (5) described how male faculty members subscribe to the research image of an institution as defining institutional quality and how



research is an important part of the image of academic success. Each college and university should decide the relative importance of teaching and research to its mission and institutional values and then see that the criteria by which its faculty are evaluated consistently reflect this decision.

The data on male-female differences in teaching loads suggests that male faculty have more time for research than female faculty. Additionally, there are data (6) suggesting that male faculty teach graduate-level courses with greater frequency than introductory courses and, thus, have more opportunity to obtain research assistance from graduate students. In universities, according to Hornig, almost 10 percent of male faculty say they are primarily researchers.

Women's Research Is Evaluated Unfairly

In institutions where "publish or perish" is the byword, considerable emphasis is placed on publications resulting from faculty research. The evidence about the publication rates of faculty seems conflicting. Simon, Clark, and Galway, in "The Woman Ph.D.: A Recent Profile" (1976), found that the percentage of Ph.D.'s who have published at least one article was higher among women than among men; however, the mean number of articles by men was higher. J.A. Centra, in *Women, Men, and the Doctorate* (1974), found that, among Ph.D.'s, men produced more books and articles than women. However, other studies show that these apparent sex differences become insignificant when factors such as field, academic rank, and type of position are considered (7).

Even when the publication rates of academic women and men are identical, however, men are promoted more rapidly (8). One reason for this may be that publications by women and men are not evaluated in the same manner. For example, in blind tests, material believed to have been written by women has been judged less

competent than the same material when thought to be by men (9).

When women's research is evaluated, the criteria may reflect male biases. Specifically, the significance of an activity or of an area of research and scholarship may be determined by what the male-dominated educational community has defined as important and legitimate. The different values held by many women and minority academicians are rarely taken into consideration, and, as a consequence, new types of scholarship and work that challenge traditional views may be deprecated or undervalued. As Janet Brown points out in "Professional Development for Women" (1976), "Without a healthy mix of women and minorities in the academic world, many values and assumptions will remain unchallenged."

This type of differential evaluation of males and females continues throughout every phase of faculty evaluation, including reviews for salary, promotion, and tenure. Faculty members serving on committees where others are evaluated should be sensitive to the problem of differential evaluation and take whatever steps they feel will be most effective in bringing this problem to the attention of the rest of the group. There is a need for training materials to help faculty, administrators, and trustees become sensitive to the problems of differential evaluation.

The Structure of Academia Still Limits Opportunities

Other factors often considered for advancement are an individual's professional visibility and service to the institution. In the past, women faculty were often excluded from panels and committees set up by the "old boys" network. In his 1973 study, "Institutional Variation in the Status of Academic Women," Robinson reported that women received fewer and less prestigious committee assignments than men. More recent anecdotal evidence suggests that women faculty may now be dealing with heavy

overloads of committee responsibilities as institutions seek to have a "token female" on every committee. Gray (10) has commented, "Few female faculty are tenured. Requiring their attendance at frequent meetings may guarantee that they will never have the time or opportunity to conduct the research necessary to pass a tenure-review procedure."

Moreover, because women and minority groups are underrepresented on college faculties, they are under special pressures to respond to the informal counseling needs of women and minority students and also to respond to requests for their services from women's groups and the minority community outside of academe. In extreme cases, these individuals are asked to represent the college to women and minority groups and to defend its actions involving women and minorities but are not given any recognition for their intermediary role.

The inability of some male faculty members to consider women as serious academicians and researchers is derived from societal attitudes that function as covert barriers to career success. Women are expected to do poorly, and when they succeed, their success is discounted. Research has demonstrated that the reasons underlying male and female success are differently perceived; male success is typically attributed to ability, while female success is typically attributed to luck (11). This tendency has been found to be more pronounced in occupations, like college professor, that are sex-stereotyped. Patricia Graham, in her 1970 study on "Women in Academe," has suggested that the inability of men to accept women as equals creates particular problems in the hiring of mature women for tenure-level positions and in promoting them to tenure. Young women can be hired for junior-level positions without an implication of equality and then cast into the stereotypic roles of daughter or mascot.

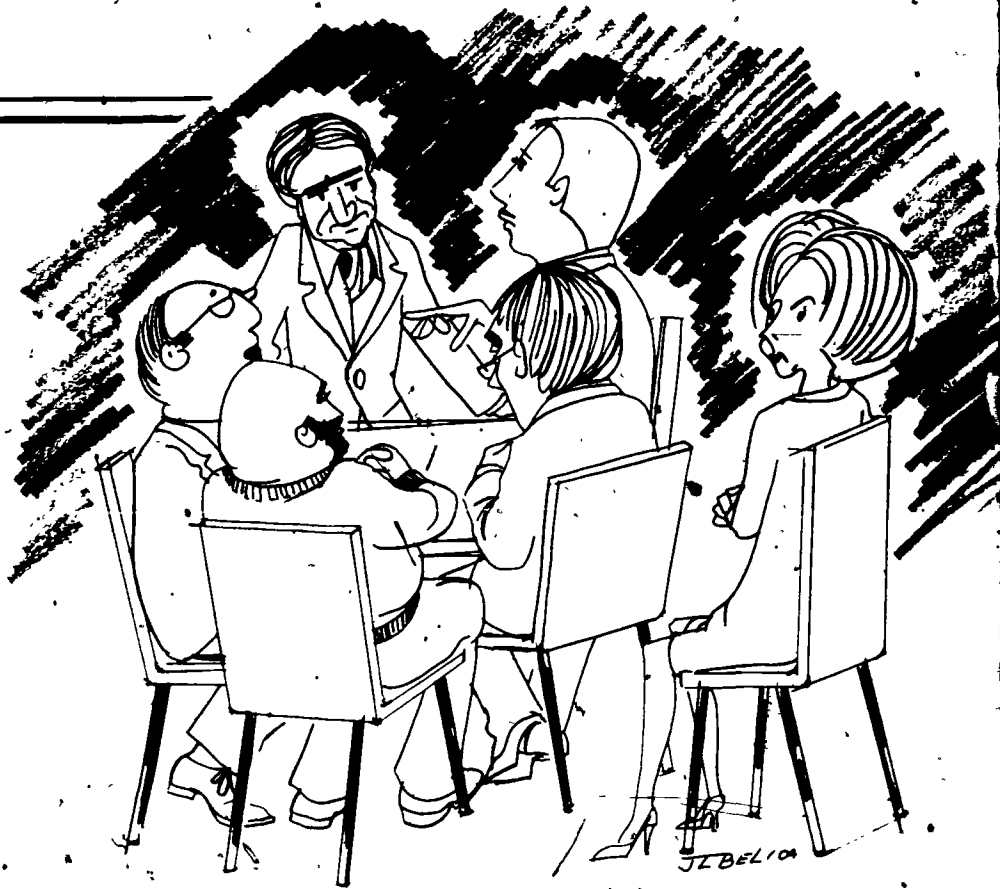
Moreover, academic women often lack access to experiences necessary for professional advancement because of

their minority status in their departments and institutions. When a woman is the only female in a department or program, she is treated differently by her colleagues. The lone woman is subject to "statistical discrimination." Either she is treated as if she resembles women on the average or she is cast into one of several stereotyped roles. Individuals who are statistical rarities must spend more time proving their competence, and this additional demand may impede professional advancement.

Women Faculty Still Earn Less than Male Colleagues

Women faculty may respond to their "token" status by exhibiting that phenomenon often described as "fear of success." However, Lockheed, in "Female Motives to Avoid Success" (1975), suggested that what these women fear is not success but being considered deviant. This fear is one reason why women's groups are so important for women faculty.

All of the research on faculty salaries shows that women earn less than men. According to 1978 data from the U.S. Office of Education, the average salaries were \$19,313 for male faculty and \$15,941 for female faculty. The salary gap tends to increase both over time and with



advancing rank. Thus, the salary difference between men and women at the level of assistant professor is 4 percent; at the level of full professor, 10 percent. Fifteen years after receiving the doctorate, women earn from 13 to 23 percent less than men. Women full professors in the sciences make from 9 to 28 percent less than men at this rank.

A variety of reasons for this salary gap have been advanced. One reason may be that there are proportionately

more women faculty in two- and four-year colleges and fewer in the research universities, where the highest salaries are found (see Chart No. 2). Another reason may be that the proportion of women is small in fields like medicine where salaries are high and large in the arts and humanities where salaries are low. But analyses controlling for field, rank, and experience show that these salary differentials persist. Thus, it seems likely that the cause of these pay differences is more fundamental and may be related to the same differential evaluation processes that account for the slower promotion of women.

There is supporting evidence for this in research by Tuckman (12), who found that the methods of determining academic salary differ for males and females.

Sandler (13) has described some of the myths that may lead to lower salaries for academic women. These include:

- Married women faculty members don't need as much money, so it's all right to pay them less.
- Unmarried women faculty members don't need as much money, so it's all right to pay them less.
- Academic women earn less than academic men because they aren't as well qualified.

CHART No. 1
Women as a Percentage of Faculty, by Rank

Rank	Male	Female
Assistant Professor	26.1	24.7
Associate Professor	27.3	26.7
Professor	28.2	27.8
Full Professor	28.5	28.7

CHART No. 2
Women as a Percentage of Faculty, by Rank, at Selected Postsecondary Institutions

Institution	Assistant Professor	Associate Professor	Professor	Full Professor
Major University	22.8	22.4	26.4	29.0
Four-Year College	10.3	13.5	20.6	29.3
Two-Year College	13.7	24.3	35.9	47.4

Source: U.S. Office of Education, "Faculty Salaries, 1976-77," and "Faculty Salaries of University Professors, 1976-77," U.S. Department of Education, Office of Postsecondary Education, Washington, D.C., 1978.

Sandler cites studies that refute the myths and shows that they are costing women faculty an average of approximately \$1,000 a year.

Liss (14) has suggested that, because of their concentration in the lowest ranks and their acceptance of myths about themselves, women faculty often fail to see that they are victims of sex discrimination. As a consequence, they "are not able to help well-intentioned administrators understand the incremental decisions that tend to exclude or discriminate against women." Stronger social networks of women faculty have been recommended as one solution. A serious commitment to improving the status of women faculty also requires that steps be taken to reduce their role conflicts, furnish them with the same kind of role models and mentors that men have available, and provide them with equitable salaries and career opportunities.

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Identifying Issues in Postsecondary Education

by Cheryl L. Wild, Richard Fortna, and Joan Knapp

Opinion leaders at almost every level of postsecondary education are deeply concerned about the growing power of federal, state, and local governments to influence policy at educational institutions.

They also worry about measuring the quality of postsecondary education and developing new modes of institutional governance and management.

These are some of the conclusions drawn from a recent Educational Testing Service study of issues in postsecondary education funded by the

National Center for Education Statistics (NCES). The purposes of this study were to identify emerging issues in postsecondary education and to develop a process that NCES could use to update the list of issues periodically.

The researchers determined that analyzing the content of journal articles and documents (including speeches and papers) written by opinion leaders was a relatively inexpensive and effective way to define issues in postsecondary education and to gather information that is useful in explicating them.

The journals selected for content

analysis were *AAUP Bulletin*, *Change*, *Chronicle of Higher Education*, *College Board Review*, *Community and Junior College Journal*, and *Compact*. From these journals, 80 articles were chosen for further study. In addition, 60 opinion leaders were identified and asked to submit documents dealing with postsecondary education that they had presented or published between January 1975 and December 1977. Forty-one responded by forwarding materials.

A total of 121 articles and documents from the journals and opinion leaders were reviewed. The

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