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ABSTRACT
This evaluation briefly considers tha numbers of women faculty at higher educational institutions, their status or rank, their distribution in various acadenic fields, and their salaries. The availability of wonen for faculty pcsitions and the process by wich they are selected are discussed. Anong the processes that can limit the hiring of women for acadesic positicns are: the use of sex-tiased criteria; institutional rules and regulations that dieproporticnally affect momen; tiased or unfair application of nentral criteria. such as differential expectations for and evaluaticns of men and women: and vomen's ovn self-concept and expectations for success. Byen when young wonen are hired as faculty nenbers, they are more likely to hold positions in the lower acadeaic ranks than are men and they do not advance as rapidly up the career ladder. Honen are often excluded from many of the opportunities that are availatle to men. Wcmen faculty continue to be affected by the same mins and differential evaluation problens which nay have liaited their enployent opportunities. Pactors that account for women faculty earning less than do comparable male faculty are discussed. (SW)

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# RESEARCH 

 MEMORANDUMISSUES 'IN' THE RECRUITMENT, PROFESSİONAL DEVELOPMENT, PROMOTION, AND remuneration of women faculty

Ruth B. Ekstrom

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Issues in the Recruitment, Professional Develppment, Promotion, and Remuneration of Women Faculty

## Ruth B. Ekstrom

## I. Introduction - Current Status of Women Faculty

According to recent data. (U.S. Office of Education; 1976), women comprise about $24 \%$ of the full-time instructional facuity in institutions 1 of higher education. While the proportion of women faculty has increased slightly in recent years (up from $19 \%$ in 1962), most of this growth has occurred as individuals under the age of 30 enter the untenured academic ranks (instructor and assistant professor) The 1975 Ladd-Lipset survey found that, among academic men and women under the age of $\mathbf{3 5}, \mathbf{1 5 \%}$ of the men and $41 \%$ of the women held the rank of instructor while only $8 \%$ of the women, as compared to $21 \%$ of the men, had reached the tenured rank of associate or full professor. The status of women faculty in private universities is especially discouraging; women comprise only about $5 \%$ of all the full professors in these institutions while they constitute nearly $10 \%$ of all the full professors in all types of"public institutions (funior colleges, colleges, and universities) and in private two and four-year colleges.

There are also tremendous differences in the percentage of women faculty in various academic fields within the faculties of major universities. Women comprise about $5 \%$ of the university natural science faculty and $18 \%$ of the social sciences faculty, as compared to $43 \%$ of the faculty in the more applied fields which have traditionally attracted women (education, library science, nursing, child development, and home economics).

Moreover, despite laws which require equal pay for equal work, women faculty still tend to receive lower pay than do men faculty; this istrue even when the type of higher educational institution where they are emplbyed and the rank which they hold are taken into consideration. For example, among university faculty the average salary for male full professors is $\mathbf{\$ 2 4 , 4 8 5}$ while for female full professors it is only $\mathbf{\$ 2 1 , 5 8 2 .}$ While the salary difference is less at the lower ranks, for example $\$ 14,638$ for male assistant professors in universities and $\$ 13,919$ for female assistant professors in these institutions, there is no type of institution or rank where the average salaries for male and female faculty are equal.

## II. Faculty Recruitment

In discussing the problem of recruitment, it is important to consider the avatlability of women for faculty positions and the process by which they are selected.

## A. Availability of Women Doctorates

Among the basic questions raised by these data on the status of academic women are "Are there enough qualified women available to increase the proportion of women on college and university faculties?" and "What is'the relationship between current and future demands for doctoral degree holders and the fields in which women have obtained doctorates?" Women were approximately $10 \%$ of the total doctoral degree recipients during the 1950's and 1960's although the proportion of doctorates awarded to women has increased sharply during the 1970's.

Moreover, in recent years, doctorates awarded to white men have decreased by $9 \%$ while those awarded to white women have increased by $\mathbf{3} 4 \%$ and to minority women by $133 \%$ (McCarthy and Wolfle, 1975). Interestingly, the increases in the doctorates awarded to women are even more pronounced in graduate departments which are rated as distinguished or strong.

However, there are considerable differences across academic fields as to the proportion of women; $45 \%$ of all doctorates awarded to women are in anthropology, biology, education, the health sciences, psychology and the Romance languages. Women also receive more than $25 \%$ of all dactorates awarded in home ecpnomics, art history, Germanic languages, comparative iiterature, social work, English, speech, library, sciences, linguistics, classics, microbiology and sociology. In other fields, how 'ever, such às engineering ánd the physical sciences, it is still diffi-: cult to find a substantial number of women doctorates. The evidence suggests that, in most academic fields, there are proportionately more women who receive the doctorate than there are women who receive regular faculty appointments. However, the supp1y of women doctorates appears to be greatest in fields which are traditionally feminine and/or which already have an oversupply of doctorates; there is still a lack of women doctorates in nontraditional and/or rapidly growing academic fields.
B. Barriers to the Recruitment of Women Faculty

Even. If. there were an adequate pool of women in every field to be recruited for available faculty' positions, the recruftment process itself 1 combines elements which can act as barriers to the employment of women. Among the processes which can limit the hiring of women for academf positions aré: 1) the use of sex-bjased criteria; 2) institutional rules and regulations' which disproportionally affect women; 3) biased or unfair application of neutral friteriach such differential expectations for and evaluation of men and women; and 4) women's own self-concept, and expectations, for succes.

1. Sex Biased Criteria

One problem in the selection af women, for any academic position.
is the nature of the job criteria. Often these criteria, because they are based on "certain assumptions about life styles, needs and career ladders which are more typical among and suitable for men than for women, indvertently discriminate. against many women. A first step in attempts to increase the number of women faculty might involve a review of job criteria prior to the advertising of the position so that requirements relating to age, full-time employment, extent of previous experience, etc., which may not be really relevant to job competency, can be revised or omitted.

## 2. Institutional. Policies.

Among the institutional rules and regulations which may operate as barriers to the recruitment of women faculty are those which limit part-time employment, nepotism rules, and inadequate provisions for maternity leave and for child care.

Because many young women faculty have family responsibilities In addition to their academic jobs, they may prefer to work part-time during some portion of their careers, such as when their children are young. Not only do many colleges and universities not allow fer temporary, part-time faculty , appointments but, in addition, those institutions which do have such appointments often consider them to be outside of the tenure track. Thus, women faculty who are able to obtain part-time positions are permanently relegated to the lower academic ranks may be able to obtain only year-toyear appointments. In addition, part-time faculty are much more vulnerable to the effects of faculty reduction than are full-time, tenure track faculty.

One possible solution is to allow faculty to switch from full-time to - part-time appointments for a limited number of years but to continue on the tenure track by requiring the part-time years to correspond to the full-time equivalents typically involved in reaching tenure. This would free the part-time faculty from having to meet criteria regarding the amount of teaching and number of publications prior to tenure which are realistic Qn1y when a faculty member works full-time. Of, course, improved maternity benefits and child care facilities could do much to remove the necessity for part-time appointments for women faculty with young childrenp

Formal nepotism rules, which in the past prevented many academic women from obtaining employment in the same institution or in the same deparṭment as their husbands, are now rapidly disappearing. However, informal policies regarding nepotism still exist and limit emplayment opportunities for many women.

A revipw of institutional policies to determine their impact on the recruitment, retention, and promotion of women faculty is an important step and is, also, in keeping with Title IX regulations.
3. Different Expectations for and Evaluation of Women and Men In addition to these more obvious barriers to the recruitment of women faculty, these are the more subtle obstacles to the employment of academic women created by the sex-role stereotyping which society holds for all women and by society's attitudes about and expectations for women.

Certain beliefs, although false, greatly restrict the opportunities available to women. These include such myths as:

- Women are less intelligent than men.
- Women do not have a real commitment to a career.
- Married women are more interested in their families than in their jobs.

Women are irresponsible and emotionally unstable.

Thus, when a group holding these views, interviews both male and female job applicants, their evaluation of equally able candidates may reflect these beliefs and result in the male being perceived as the "better" candidate. Experimental studies in a numer of academic fields have confirmed the widespread prevalence of this process. In addition, female job applicants are frequently evaluated both in terms of how well they meet the cultural standards of femininity and how well they meet the job competency standards by which both men and women are evaluated. This type of differential evaluation of males and females is not, of course, limited to individuals being recruited for faculty positions but continues throughout every phase of faculty evaluation for salary, promotion and tenure. This same process also affects other women, such as those being selected for positions as administrators and trustees.

Women who serve of committees where other women are evaluated and selected, whether for faculty, administration, or trustee positions, should be sensitive to this problem of differential evaluation and take whatever steps to remedy it as will be most appropriate with that group. Constructive efforts to make male colleagues aware of these-different views for males and females may gradually modify the extent of this process. There • is a need for training materials which could help sensitize faculty,
administrators, and trûstees to the problem of differential evaluation of men and women.

It may be helpful for aboman senior administrator to review the recommendations which faculty members write for men and women graduate students who will be seeking teaching positions. For example, if a male faculty member comments on the physical attractiveness of all of his female graduate students but for none of the males and/or on the çareer promise of all-male students but none of the females, then a discussion with this faculty member might help him to structure parallel types of letters for both sexes and to omit an arela only when it is one on which the recommender prefers not to comment.
4.- Women's Own Expectations

Women, themselves, often are affected by the societal expectations for them and, as a result, may undervaluel themselves and their own abilities. For women doctorates, this may result invtheir seeking jobs at a lower academic rank or in a less.prestigious institution than do equally able men.

Women may also feel that their own careers are secondary to their Musbands' career development: For academic women, this may lead to faking a number of low-level or temporary positions in different colleges rather than making normal progress up the tenure' ladder: It may also mean that these women are not employed at or have the opportunity to move to institutions which could best advance their professional and career development.

Despite the above problems in the hiring of women faculty, there has apparently been a sincere effort in recent years at affirmative action in their recruitment. Thus, both Bayer and Astin (1975) and Cartter
and Ruhter (1975) have reported that by the mid-1970's evidence of discrimination in first job placement and initial salary seemed to have disappeared. and accomplishments as men are advanced and remunerated in equitable fashion throughout their professional careers."

## III. Faculty Development and Promotion

Even when young women are hired as faculty members, they are more likely to hold positions in the lower academic ranks than are men and they do not advance as rapidly up the career ladder. Moreover, these women are often excluded from many of the opportunities which are available to their male counterparts. Women faculty continue to be affected by the same myth and differentel evaluation problems which may have already limited their employment opportunities:
A. Evidence about the Appointment and Promotion of Women Faculty Women faculty are more likely to receive initial appointments to the lower adademic levels than are men; they are also more likely to receive marginal appointments which are not a part of the career ladder (Robinson, 1973). Both of these tend to limit the subsequent advancement and promotion of these women.

In addition, a number of studies show that, once appointed,' wómen advance more slowly through the academic ranks than do men. For example, in studies for the National Academy of Sciences, Harmon (1965, 1968) found that, although the women doctorates in the sample had somewhat greater academic ability than the men, they achieved the status of full professor more slowly than did men. The lag varied somewhat with field, being from 2 to 5 years in the social sciences and up to 10 years
in the physical sciences. Single women were usualiy advancedfup the career ladder more rapidly than married women: Women who have been fellowship recipients have been found to advance more slowly than men even though their publication' rates' and teaching loads' are comparable, Similar evidence is available for a wide variety of academic fields as well as for many colleges and universities (Robinson, 1973). In every case, women faculty progress through the ranks at a slower rate fhan do men.

* B. Barriers to the Promotion and Professional Development of Women Faculty

Many of the same processes which affect the recruitment of women faculty also affect the advancement of women in the academic ranks and in their professional fields. Thus, the criteria for advancement may be sex-biased, institutional policies may differentially affect man and women, women and men may be evaluated differently on supposedly neutral criteria, and the woman's own role expectations and conflicts may limit her advancement. An additional barrier to the advancement of academic women is the lack of those experiences which are important for advancement. Moreover, the experience of being in a minority status may have a psychological impact on some women's' working behavior.

1. Sex-Biased Criteria

When women faculty are evaluated for promotion, the criteria may reflect male biases about what donstitutes relevant experiences for achieving a higher ranked position. Additionally, the "significance" of an activity or of an area of specialization, for research and scholarship, is defined in terms of what the male-dominated educational community has, in the past, deffined as important and "legitimate." Rarely are the
different values held by women academicians taken into consideration and, as a consequence, new types of scholarly work by women may be depreciated by men when they review women faculty for promotion or for professional honors. Brown (1976) states that exclusion of women from the research and decision-making areas of intellectual life has affected quality because of the united views of areas and priorities. "Without a healthy mix of women and minorities in the academic wor1d," she says, "many values and assumptions will reaain unchallenged."

Women faculty are described as being and report themselves as more interested in teaching than in research. Some studies suggest that. this is a consequence of a higher proportion of women faculty compared to men being in colleges and junior colleges which emphasize teaching rather than in the research universities; others suggest that it is a result of the male-female differences in fields of specialization.

Tidball (1976 a, b) has described how male faculty subscribe to the research image of an institution, as contrasted with a teaching emphasis, to define institutional quality and to be an important part of the image of academic success. Each college and university needs to decide for itself the relative importance of research and teaching in relation to its institutional image and, then, to see that the criteria by which its faculty are evaluated reflects these values.

In institutions where "publish or perish" is the byword, considerable emphasis is placed on the research done by faculty members and on the resulting publications. While some studies have found women faculty to have lower publication rates than do men (Centra, 1974), there is evidence that, in mathematics, political science, and chemistry, sex accounts for less than one percent of the variance in academic productivity (Hargens, 1971). Simon and her colleagues $(1966,1967)$ found that the sex differences in.
productivity may be related to marital, status; married female fadity were more likely to have published at least one article and had a highér mean number of articles published thanceither married men on the faculty or unmarriec women faculty, (But a considerably higher proportion of women faculty than faculty men are unmarried.) However, Centra (1974) implies that marriage is $\because \quad$. one reason for women's lower publication rate.

When faculty members who are to be reviewed have been in-. volved in research or other work in areas which are not those which the members of thequartment have studied in the past, it would be wise to bring in evaluations from outside experts rather than assuming that failure to replow the same academic furrows indicates a lack of an appropriate choice for scholarly enterprise. . This is especially important when reviewing faculty who have worked in fields like women's studies or who have developed new teaching programs to meet the needs of women entering traditionally masculine fields.

## 2. Institutional/Policies

As was discussed earlier, institutional pollcies which do not allow faculty to hold part-time positions tend to differentially affect academic women. This is especially true for younger women who face heavy expectations for teaching, research, and publishing during their first few working years which are, for many women, also the childbearingyears. Allowing the option for faculty to hold part-time appointments during some of these years and to use full-time equivalent years in setting dates for pro,motion and tenure review will provide more flexibility for those women who need it.

Institutional policies regarding support for faculty research, attendance, at professional meetings, and other professional development
activities also need to be reviewed to see if funds are to be allocated over the entire faculty rather than simply to the tenured faculty. Additionally, trustees and/or administrators may wish to encourage the acquisition of special furfds to support the professional development of junior faculty by offerfing stipends to support small research projects, participathon in frofessional organizations, and other activities which will enfance the continued intellectual growth and profersional visibility of nontenured faculty.

Of course, the availability of any such funds or other opportunities for faculty development should be announced publicly and the announcement should be repeated on a regular basis. Often, although faculty development opportunities exist, their avallability is communicated by word-of-mouth; in predominately male faculties, this can result in this information being passed on by the "old boys network" only and, hence, not being known to women faculty.
3. Differential Evaluation

When women faculty are reviewed for promotion, they must often carry the burden of many of the sex-role stereotypes which we discussed $\uparrow$ earlier.- Among these and other additional stereotypes which are frequently voiced in the evaluation of women are:

- Women fáculty lack career domitment.
- Women faculty don't do research.
- Academic women are ambivalent about success.
- Married women "will not undertake really" demanding jobs.
- Married women don't want to be promoted to fobs which would give them higher status than their husbands.

Even when these erroneous beliefs are not voiced, the same skills and competencies which are considered assets for men may be described as liabilities for women and used as obstacles to their promotion. For example, individuals in leadership positions are expected for be independent and assertive. These are positive characteristics for a man in our society but are less acceptable for women. Men are praised and promoted for being "clear headed and attentive to detail" but women exhibiting the same behaviors are often described as "tough and bitghy."

## 4. Women's Expectations

The lack of women in senior faculty and administrative positions may act as a signal, to younger women faculty that the institution is not likely to promote women or to encourage their professional advancement. This, of course, can produce a self-fulfilling prophecy with younger : faculty seeking to move to institutions where women are more visibly successful.

In order to break this cycle, it is nécessary for colleges and universities to recruit women at every level, not only for entry-level, junior faculty positions. Even in the current period of very 1 imited appointments to tenure positions, such appointments are made and there are women available to fill these senior positions. However, an extensive search may be necessary to find these well-qualified senior faculty women. To facilitate such searches, some institutions have set aside special funds to help underwrite the costs of these wider; and consequently more expensive, 1 searches to find women tq fill these role-model positions.
5. Lack of Relevant Experiences

It has been well documented that women and men being' appointed to junior faculty positions are often not treated by their senior colleagues In a comparable manner and that, as a consequence, young academic women may not have the opportunity to have the same experiences as do their male counterparts. These differences in experience, may then 1imat the women's promotional opportunities.

Part of this difference in treatment may bee relared to the expectation that women will be more interested in teaching and less interested in research. As a cpnsequence, women faculty may be more frequenty asked to teach an extra class and less frequently asked to participate in a research project mith more senior faculty. A review of teaching, loads and research participlation for men and women funior faculty would be in keeping with Tithe IX and would serve as a means of alerting administrators to possible inequitable treatment.

Moreover, young women faculty members of ten lack the kind of Interaction with colleagues which'is so important in the professional development of a scholar. Research evidence points to the importance ofs a man mentor in the advancement of many prominent women academicians/and administrators. This is partly because senior men are in a stronger position of power and influence in most organizations, whether colleges or businesses, than are women and, as a consequence, these men can better facilitate the advancement bf younger protegees. Additionally, there is the lack of senior women to serve as role-models and mentors. Moreover, some of these potential mentors may not be willing to work for the advancement of younger women either because of their own insecurity and lack of power or because they have succumbed to the "queen bee" syndrome.

However, senior men or college faculties are of considerably more reluctant to take on young women as protegees than to have young men in the same role. This may be because the stereotypes about women faculty, beçause he feels that his colleagues may insinuate that the relationship has sexual overtones, or because he simply is more accustomed to and comfortable in working with members of his own sex. As (a consequence, many formal and informal professional development opportunities are communicated only from man to man. Tenured faculty should be made more aware of this and asked, when they are selecting junior faculty to assist in research and other scholarly work, if the opportunity has been communicated to ali jufior faculty members in that department or division.

Still another factor which affects the promotion of women.
faculty is the number and type of committee assignments which they receive, In many institutions, service on committees is a factor weighed in decisions about promotion and tenure. Ofter such service is viewed as an indicator that the faculty member is concerned abou't the problems df, the college or university, as well as being a scholar and a teacher, and that the individual might have the potential to move into an'administrative position. Such conmittee service also prôvides the faculty member with an opportunity to "play campus politics" and to become better acquainted with department chairmen and administrators. Evidence from the early 1970's (Robinson, 1973) suggests that women faculty are not only given fewer committee assignments than are men but that those assignments which they receive are to less prestigious committees. More recent anecdotal reports suggest that faculty women may now be dealing with heavy overloads of committee assignments as institutions frantically search for a "token female". for every comittee.

Brown (1976) point out the importance of helping women faculty to develop their administrative skills by expanding "opportunities for themte attend professional meetings, serve on committees, work on budgets, learn compute. programing, write books, or take part in bargalifing sessions. Through such experiences, women can gain not only skill and knowkage, but the exposure, contacts, and.references necessary for mobility and survival.
6. Minority Status of Women Faculty

Of ten an academic woman finds herself as the only female in her department. This affects both how she is treated by her colleagues and her own work performance.

The lone woman is of ten subject to "statistical discrimination," that is, treated as though she resembles women on the average. Additionally, the lone female in maledominated groups is of ten cast in one of several stèereotype roles: Mother," "seductress," "pet" (group mascot), or "Iron maiden" (militant and unapproachable) according to Kanter (197.5). These women then tend to behave in ways which are reactions to the stereotypes. When a person is a statistical rarity, $s /$ he must spend more time establishing a competengy-based workipg relationship. For wọmen faculty, this additional time may'be a significant element in slowing their professional advancement.

Some women, finding themselves in the position of being the deviant member of a group, will react by exhibiting that phenomenon which has been described by Horner as Near of success." Recent reanalysis of Horner's work suggests that whiat women fear in these circumstances not guccess but being deviant (Lockheed, 1975) or conspicuously visible. This' fear is one reason why women (Blaska, 1976). Groups of wen holding similar positions can be particularly helpful in dispelling the "fear of success." Groups which give women
faculty, administrators, graduate students, undergraduates, and trustees an opportunity to meet together from time to time will help to encourage women to make status transitions.

## IV. Faculty Salaries

One study of faculty salaries (Gordon, Morton, and Braden, 1974) found that women earn approximately $10 \%$ less than do comparable men. One reason for this, they found, was that women's salaries peaked earlier than did those of men. Centra (1974) reports relatively small ancome differences between men and women in the early postdoctoral years but larger increases with time.

One factor which accounts for these salary differences, on a gross lével, is the difference in types of institutions where women and men are employed. $A s^{\circ}$ mentioned earlier, proportionally more women faculty are in junior colleges (which have relatively lower salaries) and proportiolally fewer women faculty are iniuniversities (where the highest salaries are found). *Another element in the female-male salary differences is the academic: Ciscipline difference. Thus, we find that fields tike medicine, which|are heavily male dominated, also have the highest salaries.

Data from the U.S. Office of Education's' National Center for Educational Statistics (1976) show that the average salary for men who are members of university faculties is $\$ 18,946$ while women on university faculties have an average salary of $\$ 14,660$. The discrepancy between the remuneration of women and men is much more pronounced at the upper ranks and less in the untenured positions. These data suggest that the salary differences, in part, may reflect the processes already discussed which account for women's slower promotion in academe.

A study at the University of Illinois (Loeb and Ferber, 1971) found that sex added significantly to the predictability of faculty salary but it did not.
predict rank or speed of. advancement through the ranks. These authors hypothesized that salary may be related to outside offers which are, in turn, influenced by the faculty member's visifility outside of the institution.

Sandler (1973) has described some of the myths which may lead to academic women being given lower salaries. 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 t6 pay them less.

- Academiç women earn less than academiç men because they aren't as well qualified.

The studies cited by Sander to refute this last myth indicate that an academic woman's sey/costs her approximately $\$ 1,000$ a year as compared to equally qualified men. Centra (1974) cites data that, as of 1973, faculty women were earning about $2.5 \%$ less than men (after equating the sexes on relevant background characteristics).

## Conclusion

One recent study (Liss, 1975) has suggested that because of their ignorance of the facts, concentration in the lowest ranks, acceptance of merit myths, and cooptation, women faculty fail to perceive that they are the victims of sex discrimination. As a consequence these women "are not' able to help well-intentioned administrators to understand the incremental decisions that tend to exclude or discriminate against women." Strong social networks among women aware of the affirmative action requirements for training, upgrading, and promoting underutilized women were recommended as one solution.

We must also take other actions which will reduce the role conflict for women faculty, provide them with the same kinds of exfernal support (such as role-models and mentors) which men have available, and provide them with the $\beta$ ame rewards (both in terms of salary and career opportunity) as men if we are, indeed, serious in our commitment to fmproving the status of women faculty.

## References and Resources

Bayer, A. E.; \& Astin, H. S. Sex differences in the academic reward system. Science, 1975, 188, 796-801.

Blaska, B. 'Women in academe--the need for support groups.' Journal of the National Association of Women Deans and Counselors, 1976, 39(4), 173-178.

Brown, J. W. "Professional Development for Women. In D. W. Vermilye (Ed.), $\mid$ Inddvidualizing the system: Current issues in higher education 1976. San Francisco: Jossey-Bass, $\mathbf{\delta 1 9 7 6 .}$

Cartter, A. M., \& Ruhter, W. E. The disappearance of sex discrimination in first job placement of new PhD.'s. Los Angeles, California: Higher Education Research Institute, 1975.

Centra, J. A. Women, men, and the doctorate: Princeton, N. J.: Educational Testing Service, 1974.

Gordon, N. M., Morton, T. E., \& Braden, I. C. Faculty salaries: Is there discrimination by sex, race, and discipline? American Economic Review, 1974, 64(3), 419-427.

Graham, P. A. Status transitions of women students, faculty, and administrators. In A. Rôssi \& A. Calderwood (Eds.), Academic women on the move. New York: Russell Sage Foundation, 1973.

Graham, P. A. Women in academe. Science, 1970, 169, 1284-1290.
Harmon, L. R. High school ability patterns: A backward look from the doctorate. Scientific manpower report, No. 6. Washington, D. C.: National Research Council, 1965.

Harmon, L.' R. Careers of PhD's, academic vs, nonacademic: A second report on follow-ups of doctoral cohorts. Washington, D. C.: National Academy of Sciences, 1968.

Hargens, L. The social context of scientific research. Unpublished doctoral dissertation, University of Wisconsin, 1971.

Kanter, R. M. Women in organizations: Sex roles, group dynamics, and change strategies. In A. Sargent (Ed.), Beyond sex roles. St. Paul, Minn.: West Publishing, 1975.

Leadership Training Institute. Hierarchy, power, and women in educational policy making. Washington, D. C.: Author, 1975.

Liss, Li. Why academic women do not revolt: Implications for affirmative action. Sex Roles, 1975, 1(3), 209-223.

Lockheed, M. E. Female motive to avoid success: A psychologioal barrier or a response to deviancy? Sex Roles, 1975, 1 (1), 41-50.

Loeb, J., \& Ferber, M. Sex as predictive of salary and status on a university faculty: Journal of Educational Measurement, 1971, 8(4), 235-244.

McCarthy, J. L., \& Wolfle, D. Doctorates granted to women and minority group members. Science, 1975, 189, 856-859.

Robinson, L. H. Institutional variation in the status of academic women. In A. Rossi \& A. Calderwood (Eds.), Academic women on the move. New York: Russell Sage Foundation, 1973.

Sandler, B. The academic woman: Why women need less pay (and other myths). The Chronicle of Higher Education, March 12, 1973.

Simon, R. J., Clark, S. M., \& Galway, K. The woman Ph.D.: A recent profile. Social Problems, 1967, 15, 221-236.

Simon, R. J., Clark, S. M., \& Tifft, L. L. Of nepotism, marriage, and the pursuit of an academic career. Sociology of Education, 1966, 39, 344-358.

Theodore, A. (Ed.) The professional woman. Cambridge, Mass.: Schenkman Publishing Company, 1971.

Tidball, M. E. Of men and research. Journal of Higher Education, 1976, 47, 373-389. (a)

Tidball, M. E. Equality and Success. In D. W. Vermilye (Ed.) Individualizing the system: Current issues in higher education 1976. San Francisco: Jossey-Bass, 1976. (b)
U. S. Office of Education, National Center for Educational Statistics. The condition of education, 1976 edition. Washington, D. C.: U.S.. Goyernment Printing Office, 1976.


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