RESEARCH BRIEF

VOLUME 1 NUMBER 2 2000

American Sociological Association

RESEARCH PROGRAM ON THE DISCIPLINE AND PROFESSION

Gender in the Early Stages of the Sociological Career

The share of women among doctorates in sociology has increased continuously since the 1970s, surpassing that of men in every year since 1994. This research brief examines how this change has influenced early career outcomes among women and men who recently received their PhDs. The purpose of the brief is to see whether the presence of a female majority at the lower end of the career pipeline is associated with gender equity, advantages for women, or advantages for men.

To understand the effects of this female majority for men's and women's early career outcomes, we first compare the demographic characteristics of a recent cohort of women and men PhDs in sociology. We go on to compare graduate school characteristics, graduate school experiences, and post-PhD outcomes. Our major finding is that there is relative gender equity in formal outcomes such as enrollment in prestigious graduate departments, receipt of financial support while in graduate school, and attainment of tenure-track positions. Yet, there are significant gender differences in reports of less formal and more relational aspects of graduate school experiences, including a key form of mentoring—faculty help in publishing. Since this form of mentoring may have long-term career consequences, we explore some factors that could explain these gender differences.

The data come from the *1998 Survey of Recent PhD Graduates in Sociology* undertaken by the American Sociological Association (ASA). The survey was conducted as part of a multidisciplinary study of 14 scientific fields to examine the employment market and how new PhDs begin their careers.[1] The population for the ASA study was a cohort of 634 sociology PhDs who received their degrees between July 1, 1996, and August 31, 1997.[2] The data on the institutional characteristics of graduate schools are from the *1995 ASA Survey of Graduate Departments* and the 1993 National Research Council (NRC) *Departmental Prestige Survey* (1995).

THE CHANGING GENDER COMPOSITION IN SOCIOLOGY AND OTHER SCIENCES

Thirty years of research suggest that when women are a small minority in a scientific discipline they are less likely to receive financial support and mentoring, less likely to obtain tenure-track positions at research universities, and less likely to be part of influential networks (see, for example, Biebly 1991; Fox 1991;

[1] *The study was funded by the National Science Foundation and the Sloan Foundation, under the auspices of the Commission for Professionals in Science and Technology*

[2] *The survey went into the field in February 1998, and had a 72 percent response rate from all those who could be contacted and a 69 percent response rate from the total cohort, for a total of 435 respondents. In 1999, we did a follow-up study of graduate advisors to determine if nonrespondents differed significantly from our respondent pool. Advisors' information on 115 nonrespondents indicated they were significantly more likely than respondents to be non-U.S. citizens (60 percent of these noncitizens are Asian), male, and employed in academic settings. Also, nonrespondents were slightly more likely to be African American. The employment information gathered in this survey focused on a common week of October 13, 1997.*

Table 1. Trends in the Share of Women Doctoral Recipients by Discipline, 1970 – 1997

% women	Sociology	Economics	Political Science	Psychology	Social Sciences (Total)[a]	Physical Science (Total)	Biological Science (Total)	Engineering (Total)
1970-73	21.5 (2,330)	5.6 (4,134)	11.4 (3,276)	26.2 (8,772)	13.5 (13,682)	6.3 (14,939)	17.9 (14,263)	0.7 (13,843)
1974-77	30.7 (2,784)	8.4 (4,122)	15.4 (3,538)	33.0 (11,222)	20.2 (15,091)	8.4 (11,794)	22.3 (14,038)	1.8 (11,658)
1978-81	38.0 (2,447)	11.6 (3,836)	18.8 (3,027)	41.0 (12,602)	25.8 (13,892)	11.2 (10,433)	27.0 (14,767)	3.1 (9,926)
1982-85	43.0 (2,139)	14.9 (3,822)	23.6 (2,725)	48.2 (12,881)	30.2 (13,127)	14.1 (11,293)	31.5 (15,307)	5.2 (11,506)
1982-89	46.6 (1,881)	18.3 (4,049)	27.9 (2,640)	53.9 (12,581)	33.6 (13,048)	17.1 (12,969)	35.8 (15,873)	7.1 (15,818)
1990-93	48.7 (1,988)	21.1 (4,178)	27.8 (3,102)	60.0 (13,214)	36.1 (14,267)	19.8 (14,630)	38.5 (17,287)	9.0 (21,244)
1994-97	53.1 (2,228)	23.0 (4,588)	30.8 (3,722)	64.8 (13,865)	37.5 (15,872)	22.0 (15,417)	41.8 (22,079)	11.8 (24,233)

Note: *Numbers in parentheses are the total number of PhDs awarded.*

[a] *Social sciences total excludes psychology but includes "other" social sciences.*

Source: *Data tabulated from the National Science Foundation, Division of Science Resource Studies, Science and Engineering Degrees: 1966-1997, tables 26, 35, and 49-54.*

Grant and Ward 1992; Long 1990; Long and Fox 1995; National Science Board 1998; Reskin 1978, 1992; Sonnert and Holton 1995; Zuckerman 1991). In other words, when there are "too few women" in a discipline, women tend to be marginalized and treated as outsiders (Cole and Zuckerman 1984). Since the 1970s, some disciplines have begun to feminize in the sense that the number of women has increased in both absolute and relative terms while the number of men has decreased.

There has been a general upward trend in the numbers of women among doctoral recipients across disciplines, and a general downward trend in the numbers of men in the social, physical, and biological sciences (see Table 1). In the social sciences, this upward trend in the share of women began in the early 1970s and has lasted through the early 1990s. Sociology and psychology experienced a rapid growth of women compared to economics and political science. In sociology, large numbers of women, encouraged by affirmative action and equal opportunity and also by the relevance of its subject matter to their lives, began to fill places left by men (Reskin 1995; Roos and Jones 1993). In 1997, women were awarded 55 percent of the PhDs in sociology, whereas they obtained only one-third of the PhDs in political science and less than one-quarter of PhDs in economics. In the physical sciences, women still constitute less than one-quarter of PhD recipients (although this percent was almost four times as high in the late 1990s as it was in the early 1970s). In the biological sciences, women's share of new PhDs increased to over 40 percent as of 1997.

The study of the share of women in sociology and its impact on careers is not new. For example, in 1968 when women's minority status in sociology was comparable to that in economics and the physical sciences today, the ASA established a Committee on the Status of Women in Sociology in response to widespread and vocal demands. This committee investigated the degree of women's marginality in the profession. An early report found that women graduate students were likely to be excluded from the sponsorship system as graduate students and were clustered in part-time and nontenure-track appointments after they received their PhDs (Hughes 1973).

Studies of sociologists during the mid-1980s—when women's share of PhDs reached just over 40 percent (comparable to the biological sciences today)—found that men were still more likely to receive financial support in graduate school, more likely to obtain appointments in large research universities, and more likely to be tenured (Kulis 1988). The increasing share of women PhDs did not seem to be translated into increased shares of women faculty, except at large public universities with high faculty turnover (Kulis and Miller-Loessi 1992). In fact, women's share of faculty was flat between 1974 and 1985 (Roos and Jones 1993). The flatness of demand for women faculty was attributed, in part, to the fact that large numbers of women entered sociology when the growth of most disciplines in the academy, especially in sociology, was sluggish (Kulis 1988; Roos and Jones 1993).

By the early 1990s when women received almost half of all PhDs in sociology, they seem to have made progress. A study, based on a survey of job positions listed in ASA's Employment Bulletin, suggested that there was no evidence of a gender difference in terms of hiring at the assistant professor level or hiring in more prestigious departments (Misra, Kennelly, and Karides 1999). Yet, women were still significantly less likely to be hired above the level of assistant professor.

It is still too early to predict career outcomes for the current cohort of women sociologists as they attempt to move up the ranks into senior positions in the profession.[3] There are reasons to expect that we will find an improvement of women's status in the late 1990s, at least in the early stages of the profession. For example, women's leadership has been institutionalized in the discipline. More women faculty are available to mentor women graduate students, and changes in subject matter of the discipline (especially the growth of gender studies) may make it more receptive to women's interests (Roos and Jones 1993; Rosenfeld, Cunningham, and Schmidt 1997). In addition, there are indications that growth in sociology is no longer sluggish in terms of BA production, departments' hiring of new faculty, and federal funding.[4] These are circumstances that could result in increasing rewards (including faculty positions) going to women. Will circumstances that benefit women result in negative outcomes for men? Or, will the shrinking share of men require extra incentives for them to stay in the discipline, and these demands and the willingness to fulfill them keep the distribution of rewards skewed toward men (Kulis 1988)?

As women become the majority of new PhDs in sociology, any one of three alternative scenarios could emerge. The first scenario is one of gender equity in the distribution of rewards between men and women, as women and men achieve their fair share of teaching and research positions. The second is that women, as a majority, obtain an unfair share of the rewards in the discipline, as men did in the past when they were a majority. The third is that women remain marginalized in the discipline because men require extra incentives to stay in the discipline. Women's marginalization may also result from women's continued exclusion from the prestigious networks and resources of the discipline. We review what the survey results tell us about which, if any, of these scenarios appears to be the case in sociology.

[3] *Some suggest that feminized disciplines will have to deteriorate in terms of salary and status before men stop competing for the top-ranked positions (Reskin 1995).*

[4] *For BA growth, see data from the National Science Foundation, Division of Science Resources Studies, at www.nsf.gov/sbe/srs/nsf00310/start.htm. Data on department growth are based on unpublished analyses from the Survey of Graduate Departments conducted by the ASA. Data on federal funding to sociologists are from the National Science Foundation, 1988 Science and Engineering Indicators.*

RESULTS

Demographic Characteristics

Fully 6 out of 10 respondents to the *1998 Survey of Recent PhD Graduates in Sociology* were women (for a total of 257 women and 174 men).[5] The proportion of women in the cohort follows the trend of a female majority among new doctorates in the profession. Women were slightly older than their male counterparts: The average age of women respondents was 37.5 compared to 36.2 for men. As Table 2 shows, women were more likely than men to report their race as "white" (76 percent versus 65 percent), making white women the largest group in this cohort. The proportion of African Americans was twice as great among men as among women (13 percent versus 6 percent), while the proportion of Asians was similar for women and men. The proportions of Hispanics and Native Americans/Other remained below 5 percent for each sex.

Table 2. Demographic Characteristics of Women and Men in the 1996-1997 Sociology PhD Cohort

	Women (N = 257)			Men (N = 174)	
Characteristic	**Mean**	**(SD)**		**Mean**	**(SD)**
Age	37.5	(7.9)	*	36.2	(7.7)
Race/ethnicity					
White	.76	(.43)	**	.65	(.48)
African American	.06	(.24)	**	.13	(.33)
Asian	.11	(.31)		.13	(.33)
Hispanic	.02	(.15)		.05	(.21)
Native American/Other	.05	(.21)		.05	(.23)

* $p < .05$
** $p < .01$ (one-tailed t-tests for gender differences in means)

Source: *American Sociological Association, 1998 Survey of Recent PhD Graduates in Sociology.*

Institutional Characteristics of Graduate Schools

The women and men in this cohort attended similar types of universities and equally prestigious graduate departments (see Table 3). There was no significant gender difference in the proportion who received their PhDs from sociology departments at

Table 3. Institutional Characteristics of PhD Sociology Departments Attended by Women and Men in the 1996-1997 PhD Cohort

	Women (N = 257)			Men (N = 174)	
Institutional Characteristic	**Mean**	**(SD)**		**Mean**	**(SD)**
NRC prestige score[a]	40.20	(28.20)		39.10	(30.80)
Research I university in Carnegie code	.76	(.43)		.76	(.43)
Proportion female among faculty at all ranks	.31	(.10)		.30	(.09)
Proportion female among faculty at full/associate levels	.26	(.12)		.25	(.11)
Proportion female among graduate students	.60	(.08)	**	.58	(.09)
Proportion with female advisors	.32	(.46)	***	.17	(.38)

** $p < .01$
*** $p < .001$ (one-tailed t-tests for gender differences in means)
[a] For NRC prestige scores, low values indicate high prestige.

Source: *National Research Council, 1993 Departmental Prestige Survey; American Sociological Association, 1995 Survey of Graduate Departments and 1998 Survey of Recent PhD Graduates in Sociology.*

[5] *The share of female respondents in the ASA survey is somewhat higher than the 55 percent reported in the 1997 Survey of Earned Doctorates by the National Science Foundation. These data can be found in Table 1 or at www.nsf.gov/sbe/srs/nsf00310/start.htm.*

the largest and best-funded universities (titled "Research I" universities in the Carnegie Foundation's classification): Three-quarters of both women and men attended this type of university. Likewise, there was no significant gender difference in the average prestige scores of the sociology departments that they attended.[6] Women in this cohort were no more likely than their male counterparts to have attended graduate departments with a high proportion of female faculty (in each case about 3 out of 10 faculty members were women). Women attended departments with slightly higher proportions of female graduate students than did men and the difference was statistically significant. Women were twice as likely as men to have female advisors (32 percent versus 17 percent). This significant difference suggests that faculty and students may be seeking same-sex mentoring relations.

Graduate School Awards, Skills, and Mentoring

There were no significant differences between the proportions of women and men who reported receiving financial awards (see Table 4). A similar proportion of women and men received teaching assistantships (79 and 80 percent), research assistantships (65 and 68 percent), fellowships (56 and 58 percent),[7] and dissertation fellowships (29 and 31 percent). Also, there was no significant difference in the proportions that received funding to attend profes-

Table 4. Graduate School Rewards of Women and Men in the 1996-1997 Sociology PhD Cohort

	Women (N = 257)			Men (N = 174)	
Graduate School Reward	**Mean**	**(SD)**		**Mean**	**(SD)**
Financial support received:					
Teaching assistantship	.79	(.41)		.80	(.40)
Research assistantship	.65	(.48)		.68	(.47)
Fellowship	.56	(.50)		.58	(.49)
Dissertation fellowship	.29	(.46)		.31	(.46)
Graduate training included skills/opportunities for:					
Proposal writing	.52	(.50)		.60	(.49)
Effective presentation	.75	(.43)		.79	(.41)
Presentation of research outside university	.88	(.32)		.88	(.33)
Funding to attend professional meetings	.64	(.48)		.64	(.48)
Teacher training	.46	(.49)	*	.55	(.50)
Interaction with nonacademics	.34	(.48)	*	.43	(.49)
Mentoring relations:					
Received faculty encouragement for publication	.75	(.43)		.82	(.39)
Received faculty help for publication	.44	(.49)	**	.58	(.50)

* $p < .05$
** $p < .01$ (one-tailed t-tests for gender differences in means)

Source: *American Sociological Association, 1998 Survey of Recent PhD Graduates in Sociology.*

[6] *While there was no significant difference between men and women overall, there was some noticeable difference by family status. Those who had any children during graduate school years—especially women—were more likely than others to attend lower prestige departments. For example, over half of women who were mothers during graduate school attended sociology departments that were rated below the top 50 percent in the NRC prestige ranking, compared to only about one-third of men and women without children. The comparable figure for fathers was about 42 percent.*

[7] *Fellowships included those awarded internally and those awarded by external sources.*

sional meetings.[8] Similarly, women and men did not differ in learning certain skills in graduate school. There were no significant differences in the proportions of women and men who reported learning to write proposals, present research effectively, and present research outside their university.

There were, however, several significant differences between women and men in reported access to certain skills and relationships that could affect careers. A significantly higher proportion of men than women reported receiving effective training as a teacher. Also, a higher proportion of men reported that they had occasions to interact with nonacademic sociologists. Perhaps most important, a significantly higher proportion of men than women reported that they received help from faculty for publication. Close to 6 out of 10 men responded that they received faculty help in publishing, whereas only 4 out of 10 women reported receiving such help. Similarly, while the difference was not statistically significant, a higher proportion of men also reported being encouraged by faculty to publish. This sort of mentoring relationship has been found to be most important in predicting early scholarly productivity (Long 1990).

In addition to a gender difference, there was a significant difference by race in reported faculty help. Whites, as a group, were significantly more likely to report receiving faculty help than were people of color (55 percent versus 39 percent). Within each race, the gender difference was still significant, with white men reporting the most help, white women and men of color in the middle, and women of color reporting the least help in publishing.[9]

Reasons for Differences in Mentoring

Since differences in faculty help in graduate school can have long-run consequences, we examined whether relational and locational differences helped to explain gender differences in the receipt of such help.

Gender matching as a reason for differential faculty help. We examined whether gender matching between the faculty member and the student resulted in more help in publishing. We expected that women with female advisors would report receiving more help than would women with male advisors or men with female advisors. We found that women did not report receiving more faculty help from female advisors, whereas men—especially white men—benefited from having female advisors (although the number was small). In fact, women in general received significantly less faculty help whether their advisor was male or female. In short, gender matching of student and advisor did not appear to explain male-female differences in the reported receipt of faculty help (see Figure 1).

Specialty area as a reason for differential faculty help. Did specialty area explain reports of differential faculty help in publishing? We examined two specialty areas—one a predominantly female specialty and the other a traditionally male specialty. The movement of women into sociology resulted in the growth of new subject areas—the most prominent of these is usually labeled as "Sex and Gender." Women are the primary theorists and researchers in this subfield (for example, approximately 70 percent of the membership of the ASA's "Sex and Gender" section are women). Fully one-quarter of women PhDs in the survey reported that gender was a subfield of study, in contrast to a very small number of men (only five men). Were women who specialized in a gender subfield more likely to report receiving faculty help in publishing? Because only a few men reported having a gender specialty, we compared women who did and did not report gender as a specialty area. Women who specialized in gender were only slightly more likely to report receiving faculty help than were women without a gender specialty, and the difference was not statistically significant (results not shown). Also, while over half of women

[8] *The series of questions regarding graduate training was asked in the following format. Answer "basically true" or "basically false" to the following: During my PhD training, "I had opportunities to learn proposal writing to support research activities."*

[9] *The percentage of respondents who reported receiving faculty help was as follows: 65 percent of white men, 50 percent of white women, 48 percent of men of color, and 29 percent of women of color.*

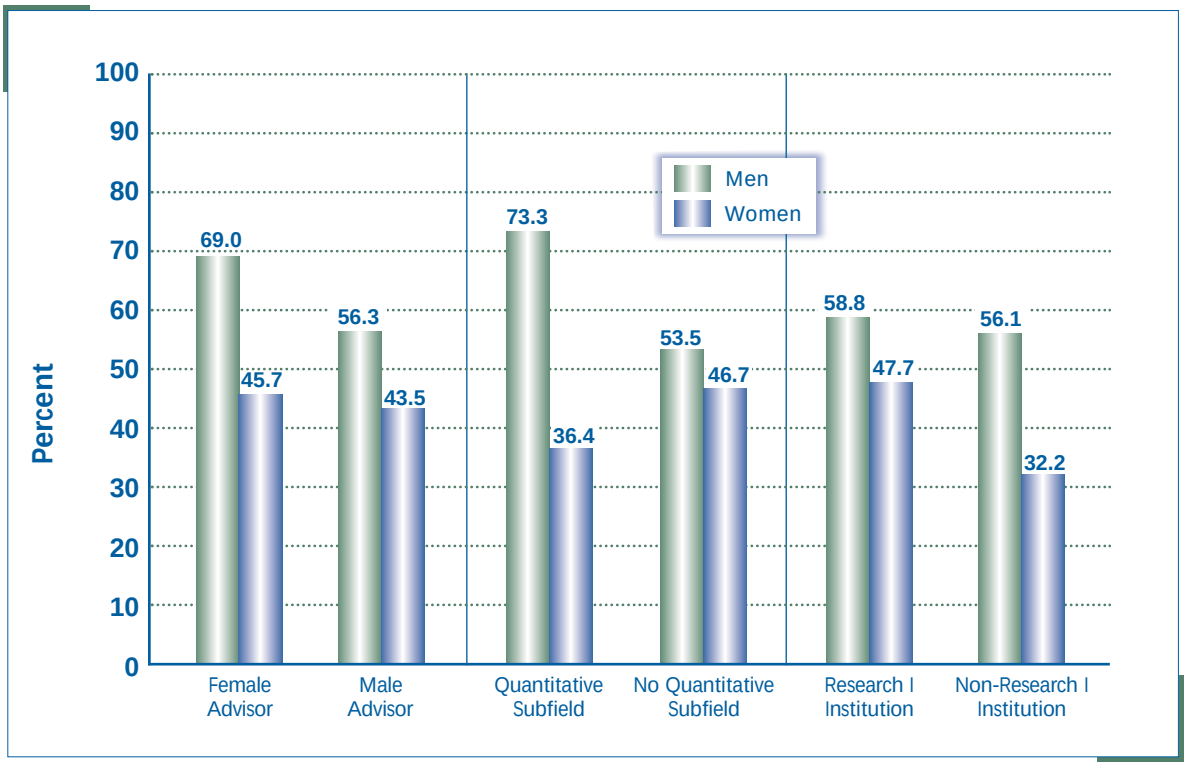

Figure 1. Percent of Men and Women Reporting Faculty Help in Graduate School by Advisor's Gender, Quantitative Methods Subfield, and Institution Type

Note: *Total Ns: women with female advisor (N=81), women with male advisor (N=70), men with female advisor (N=29), men with male advisor (N=140), women at Research I Institution (N=193), women at non-Research I Institution (N=59), men at Research I Institution (N=131), men at non-Research I Institution (N=41), women with quantitative subfield (N=33), women without quantitative subfield (N=210), men with quantitative subfield (N=30), men without quantitative subfield (N=127).*

Source: *American Sociological Association, 1998 Survey of Recent PhD Graduates in Sociology*

who specialized in gender had a female advisor (compared to only a quarter of women without a gender subfield), the gender of the advisor did not make a significant difference in reported faculty help for those who specialized in this subfield.

Similar proportions of women and men (14 percent of women and 19 percent of men) specialized in quantitative methods—a subfield traditionally thought of as "male" (about 70 percent of the members of the ASA's "Methodology" section are men). The difference in the proportions of women and men with this specialty was not statistically significant. There was a significant difference, however, in the percentage of women and men with this specialty who reported receiving faculty help in publishing. Figure 1 shows that men with a specialty in quantitative methods were twice as likely to report receiving faculty help as were women in this specialty (73 percent as opposed to 36 percent). For women, specialization in quantitative methods resulted in somewhat less reported faculty help than was reported by women without this specialty, although the difference was not significant. In sharp contrast, men who specialized in quantitative methods were significantly more likely to report faculty help than were men who did not have this specialty. In other words, while women did not report receiving additional help when they specialized in gender, men did report additional help when they specialized in quantitative methods, with the potential effect of reproducing male domination in this subfield.

Type of university as a reason for differential faculty help. As noted, there was no statistically significant difference in the proportion of women and

men who attended Research I universities. Attendance at these universities, however, appeared to be more critical for women's reporting faculty help than it was for men. Similar proportions of men—over half of them—reported receiving faculty help regardless of whether or not they attended Research I universities. In contrast, women who attended Research I universities reported receiving significantly greater faculty help than did women who attended other types of universities (48 percent versus 32 percent).[10] In subsequent analyses (not shown), we found that women in Research I universities were more likely than women in other universities to have access to research assistantships, and having a research assistantship was crucial for reporting the receipt of faculty help. Yet, women in Research I universities still reported receiving less faculty help than did similarly located men. These findings suggest that gender is more important than location in explaining differences in this form of mentoring.

Post-PhD Experiences

For many, the reward of completing a PhD is to obtain a permanent job as a "professional sociologist" doing the work for which one was trained. The great majority of this cohort preferred a tenure-track job in the academy (Spalter-Roth, Thomas, and Levine 2000). Have women begun to obtain a disproportionate share of the desired positions as a result of the feminization of PhD production in sociology? Or, did some of the additional faculty help reported by men give them an advantage in obtaining the preferred jobs?

Employment status. The answer appears to be that neither men nor women experienced significantly different post-PhD employment statuses, although some differences are worth noting (see Table 5). As of the week of October 13, 1997, almost all members of the cohort were employed—96 percent of men and 93 percent of women. The rest were either unemployed

Table 5. Post-PhD Employment Experiences of Women and Men in the 1996-1997 Sociology PhD Cohort

	Women (N = 257)			Men (N = 174)	
Employment Experience	**Mean**	**(SD)**		**Mean**	**(SD)**
Employment status					
Employed as of October 1997	.93	(.26)		.96	(.20)
Employed in a permanent position	.63	(.48)		.68	(.47)
Employed in an academic position	.84	(.37)		.82	(.30)
Current employment is first job choice	.49	(.50)		.56	(.50)
Employment among academics only					
In a tenure-track position	.54	(.50)		.56	(.50)
In a research/doctoral university	.58	(.50)		.64	(.50)
In a tenure-track position at a research/doctoral university	.29	(.45)		.36	(.48)
Job satisfaction [a]					
Salary and benefits	3.36	(1.23)		3.37	(1.26)
Challenging work	3.99	(1.02)		3.92	(1.11)
Institutional resources	3.30	(1.29)		3.38	(1.34)
Support for professional productivity	3.54	(1.31)		3.65	(1.42)
Supportive environment toward women	3.52	(1.18)	*	3.73	(1.00)

* $p < .05$ (one-tailed t-tests for gender differences in means)

[a] The values for job satisfaction range from 1 ("very dissatisfied") to 5 ("very satisfied")

Source: *American Sociological Association, 1998 Survey of Recent PhD Graduates in Sociology.*

[10] *This was true even after we controlled for other demographic characteristics—such as race and family status—that could influence one's attendance at a Research I university.*

or not in the labor force for reasons of health, additional schooling, care of dependents, and so forth. In addition, there was no significant difference between women and men in terms of the share of those holding a permanent position (63 and 68 percent), a position in an academic setting (84 and 82 percent), or a tenure-track position (54 and 56 percent). Men obtained a somewhat higher share of tenure-track positions at research/doctoral universities[11] and a higher share of jobs that were their first choice, but these differences were not statistically significant.

Job satisfaction. Respondents were asked to rate their satisfaction with various aspects of their post-PhD positions on a scale that ranged from 1 ("very dissatisfied") to 5 ("very satisfied"). The results show that the cohort was generally neutral or satisfied. No significant gender differences were found in the degree of satisfaction regarding salary and benefits, the challenge of the work, the availability of institutional resources, and support for their professional productivity. Satisfaction with "supportive environment toward women" was the only job characteristic for which we found a significant gender difference: Women were less satisfied than men.

Employment in an academic setting. Of those employed in an academic setting, more than half of women and men held tenure-track positions. Figure 2 shows that the remainder held appointments that included research positions (the majority of these research positions were postdoctoral fellowships) or adjunct positions. Both types of positions were held equally by women and men. Women were somewhat more likely to hold "other" positions (e.g., administrative positions), while men were slightly more likely to hold nontenure-track assistant professor positions.

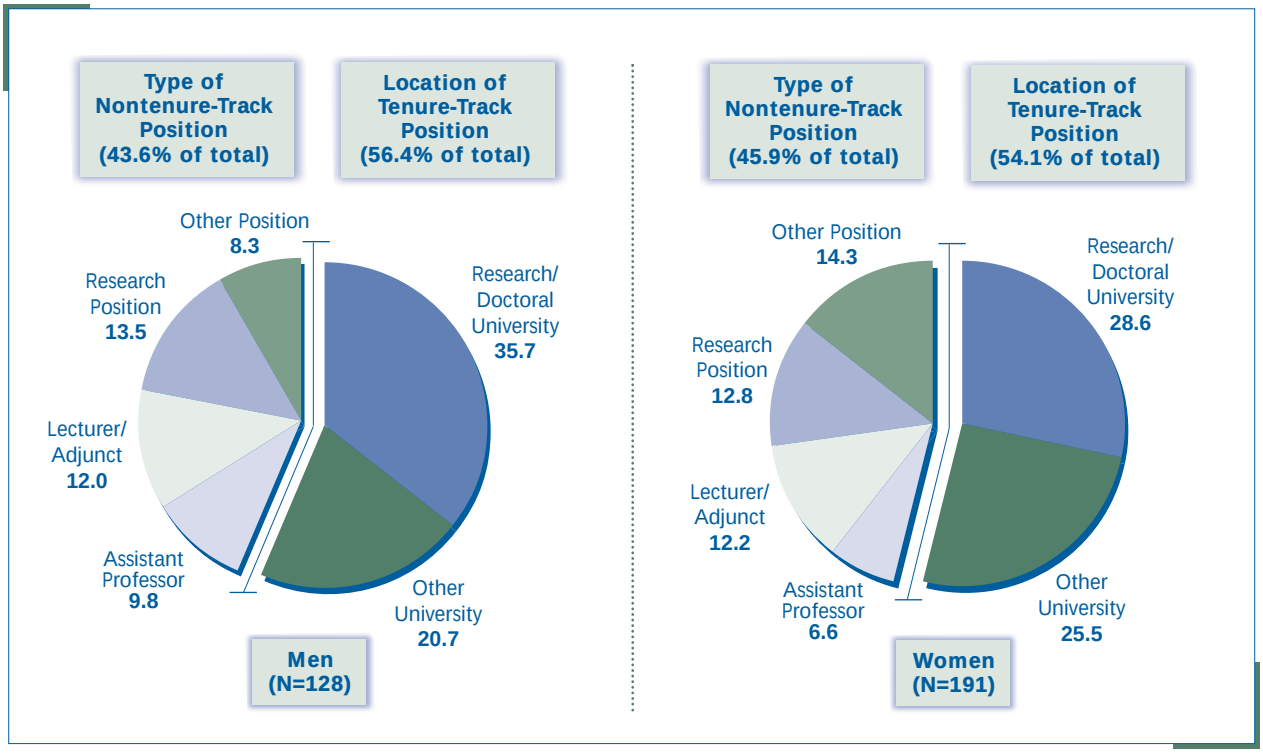

Figure 1. Percent of Men and Women in Different Positions of Academic Employment

Source: *American Sociological Association, 1998 Survey of Recent PhD Graduates in Sociology*

[11] *This category includes Research I and II and Doctoral I and II universities in the Carnegie Foundation's classification.*

Tenure-track positions at research universities. Comments by respondents suggested that the most prestigious jobs for new PhDs are tenure-track jobs at research/doctoral universities. These are the jobs that tend to have the smallest teaching loads and the most resources. As reported earlier, a somewhat smaller proportion of women than men (29 percent versus 36 percent) held tenure-track jobs in these universities, although the difference by gender was not significant (see Table 5).

According to multivariate analyses (results not reported), both women and men who received their PhDs from the most prestigious sociology departments were more likely to obtain tenure-track jobs at research/doctoral universities. In addition, receiving faculty help in publishing—a relationship in which women reported being disadvantaged—was crucial for obtaining tenure-track positions at these institutions.

CONCLUSION

This research brief examined career outcomes for a recent cohort of PhDs in sociology, a discipline that has experienced feminization at the lower end of the career pipeline. We suggested three alternative outcomes of this sort of occupational feminization. The first was one of gender equity in the distribution of skills, financial support, mentoring, and employment. The second was that women obtain an unfair share of the rewards in the discipline, as men did in the past when they were a majority. The third was that women remain outsiders in the profession, despite the increasing numbers at the lower end of the pipeline.

The findings presented here suggest that the first scenario most closely describes career outcomes for women and men in this recent cohort of PhDs. The increasing share of women in the profession appears to have resulted in relative gender equity, especially when outcomes were based on formal selection criteria. We found no significant differences between women and men in terms of graduate school location, financial resources received, most of the skills acquired in graduate school, and post-PhD employment. Women did not appear to receive an unfair share of advantages. In fact, women appeared to be still disadvantaged in their access to an important mentoring relation—faculty help in publication—regardless of the sex of their advisor, their area of specialization, and the type of university they attended. Attending Research I universities increased the help they reported receiving during graduate school, but they still reported receiving significantly less help than their male peers, regardless of institutional location. Race, along with gender, played a significant part in differential reports of faculty help: White men reported receiving the most faculty help while women of color reported the least.

Men did not appear to be disadvantaged as a result of feminization in the early stages of the career pipeline. They reported significantly greater training as teachers and greater interaction with nonacademic sociologists. Even more important, they reported receiving significantly more help from faculty in publishing, benefiting more than women did from having female advisors and from specializing in quantitative methods. In addition, men seemed to have some advantage in obtaining tenure-track positions at research/doctoral universities, although the gender difference was not statistically significant. Greater faculty help in publishing seems to be an important part of the explanation for why men appear to be somewhat advantaged in obtaining the most desirable jobs. Less faculty help for women suggests that full integration into professional relations may not yet be complete, despite their numerical majority.

The findings regarding gender and also race differences in reported faculty help in publishing call for additional explanations. The answers may be found in the negotiations and evaluations that occur as students attempt to gain faculty help and faculty attempt to protect their time. Differences in a graduate student's human capital and/or race and gender stereotypes may play a part in these evaluations. Additional contextual factors that we have not examined, such as department growth, amount and sources of university funding, and interest-group

pressure, may play a part as well. Future quantitative and qualitative research will shed additional light on gender equity in the distribution of rewards at the early stages of a career in sociology. Future research will also help assess whether faculty help in publishing at this early career stage produces a significant impact later in the career trajectory.

By Roberta M. Spalter-Roth and Sunhwa Lee. Graphics prepared by Andrew Sutter.

REFERENCES

Bielby, William T. 1991. "Sex Differences in Careers: Is Science a Special Case?" Pp. 171-87 in *The Outer Circle: Women in the Scientific Community,* edited by Harriet Zuckerman, Jonathan R. Cole, and John T. Bruer. New Haven, CT: Yale University Press.

Cole, Jonathan R. and Harriet Zuckerman. 1984. "The Productivity Puzzle: Persistence and Change in Patterns of Publication among Men and Women Scientists." *Advances in Motivation and Achievement* 2: 217-58.

Fox, Mary Frank. 1991. "Gender, Environmental Milieu, and Productivity in Science." Pp. 188-204 in *The Outer Circle: Women in the Scientific Community,* edited by Harriet Zuckerman, Jonathan R. Cole, and John T. Bruer. New Haven, CT: Yale University Press.

Grant, Linda and Kathryn Ward. 1992. "Final Report to the U.S. Department of Education, Office of Educational Research and Improvement." Grant #R117E0090.

Hughes, Helen MacGill. 1973. "The Status of Women in Sociology, 1968-1972." Report prepared for the American Sociological Association.

Kulis, Stephen. 1988. "The Representation of Women in Top Ranked Sociology Departments." *The American Sociologist* 19: 203-17.

Kulis, Stephen and Karen Miller-Loessi. 1992. "Organizations, Labor Markets, and Gender Integration in Academic Sociology." *Sociological Perspectives* 35: 93-117.

Long, J. Scott. 1990. "The Origins of Sex Differences in Science." *Social Forces* 68: 1297-1316.

Long, J. Scott and Mary Frank Fox. 1995. "Scientific Careers: Universalism and Particularism." *Annual Review of Sociology* 21: 45-71.

Misra, Joya, Ivy Kennelly, and Marina Karides. 1999. "Employment Chances in the Academic Job Market in Sociology: Do Gender and Race Matter? *Sociological Perspectives* 42: 215-47.

National Science Board. 1998. *Science and Engineering Indicators – 1998.* Arlington, VA: National Science Foundation.

Reskin, Barbara. 1978. "Sex Differentiation and the Social Organization of Science." *Sociological Inquiry* 48: 6-36.

_____. 1992. "Women in Science: Conflicting Views on Where and Why." *Contemporary Sociology* 21: 571-73.

_____. 1995. "Women in Social and Behavioral Sciences." Presented at the National Science Foundation's conference on women in science, December 4, Washington, DC.

Roos, Patricia A. and Katherine W. Jones. 1993. "Shifting Gender Boundaries: Women's Inroads into Academic Sociology." *Work and Occupations* 20: 395-428.

Rosenfeld, Rachel, David Cunningham, and Kathryn Schmidt. 1997. "American Sociological Association Elections, 1975 to 1996: Exploring Explanations for 'Feminization'." *American Sociological Review* 62: 746-59.

Sonnert, Gerhard and Gerald Holton. 1995. *Gender Differences in Science Careers: The Project Access Study.* New Brunswick, NJ: Rutgers University Press.

Spalter-Roth, Roberta M., Jan Thomas, and Felice J. Levine. 2000. "New Doctorates in Sociology: Professions Inside and Outside the Academy." Research Brief No. 1, American Sociological Association.

Zuckerman, Harriet. 1991. "The Careers of Men and Women Scientists: A Review of Current Research." Pp. 27-56 in *The Outer Circle: Women in the Scientific Community,* edited by Harriet Zuckerman, Jonathan R. Cole, and John T. Bruer. New Haven, CT: Yale University Press.

AMERICAN SOCIOLOGICAL ASSOCIATION
1307 New York Avenue NW
Suite 700
Washington, DC 20005-4701