I E F

VOLUME 1 NUMBER 1

## American Sociological Association

RESEARCH PROGRAM ON THE DISCIPLINE AND PROFESSION

### New Doctorates in Sociology: Professions Inside and Outside the Academy

This research brief examines career aspirations and transitions from graduate school into academic and nonacademic positions for a cohort of recent PhD graduates in sociology. The data show that the job market for these new PhDs appears to be relatively favorable compared to their peers in other disciplines. The data also show a strong preference for employment in tenure-track academic career lines. Despite the continuing restructuring of the academic job market and a healthy job market outside the academy, the vast majority of respondents report having received little or no encouragement to pursue nonacademic careers while in graduate school. Training and aspirations for academic careers still dominate. Among the new PhDs who found employment outside the academy, more than half of those who were looking for new jobs had set their sights on returning to the academy, though not necessarily in faculty positions.

The data are based on an American Sociological Association (ASA) survey of PhDs who received their degrees between July 1996 and August 1997. The survey was conducted in 1998 as part of a multidisciplinary project of 14 scientific fields to examine the employment market and how new PhDs begin their careers.<sup>2</sup> Of the 634 sociologists who received their PhDs during this period, 435 participated in this study.<sup>3</sup>

We report first on what the job market holds for current PhDs in sociology, and how this compares to other fields. Then we address three questions:

- 1. What are the factors that account for initial employment in academic and nonacademic work settings?
- 2. What are the experiences and levels of satisfaction of PhDs in these different work environments?
- 3. How do recent graduates navigate and think about the next steps in their careers?

<sup>&</sup>lt;sup>1</sup> Between 1993 and 1997, fully 67 percent of the 94,760 newly created faculty positions in four-year colleges and universities were part-time (U.S. Department of Education, Center for Education Statistics, Integrated Postsecondary Education System (IPEDS), Fall Staff in Postsecondary Institutions, 1997 and 1993).

<sup>&</sup>lt;sup>2</sup> This multidisciplinary project was funded by the Sloan Foundation and the National Science Foundation (NSF). The project was coordinated through the Commission on Professionals in Science and Technology (CPST). The ASA survey was directed to all sociology graduates who received their PhD degrees between July 1, 1996 and August 31, 1997. The survey focused on the job search process of these recent graduates, their early career experiences, and their job satisfaction using a set of standardized questions. Graduates from all disciplines were asked about employment during a specific week (October 13, 1997). Along with the standardized questions about labor market experiences asked by all the participating disciplines, ASA added questions about prior career experiences, professional networks, professional productivity, and work-family issues.

<sup>&</sup>lt;sup>3</sup> Of all the disciplinary associations participating in the survey, ASA had the highest return rate—72 percent of those who could be contacted and 69 percent of the full cohort. In 1999, we did a follow-up study of graduate advisors to determine if nonrespondents were significantly different from our respondent pool. Based on the 115 nonrespondents for whom we have information, they were significantly more likely than respondents to be non-U.S. citizens (60 percent of these non-citizens are Asian), male, and employed in academic settings. Also, nonrespondents were slightly more likely to be African American.

**Table 1. Employment Status of Recent PhD Graduates** 

	Percent			
Field of Study	Unemployed	Employed Part-Time	Employed in Temporary Positions	Employed in Academe
Biochemistry and Molecular Biology	4.0	2	79	73
Chemistry	4.6	2	58	57
Chemical Engineering	3.2	.5	26	25
Computer Science	2.4	1	17	43
Earth and Space Sciences	3.9	8	53	53
Economics	2.3	5	19	59
Engineering	2.7	2	24	32
Mathematics	2.4	5	46	70
Microbiology	2.2	1	81	70
Physics	1.8	3	57	45
Physiology	2.7	2	75	82
Political Science	7.0	14	41	78
Psychology	0.6	24	25	37
Sociology	3.4	8	35	83

Source: Commission on Professionals in Science and Technology (1998); Employment of Recent Doctoral Graduates in Science and Engineering: Results of Professional Society Surveys. www.cpst.org/web/site/pages/pubs/pdf\_pubs/98data-1.pdf.

## THE EMPLOYMENT PICTURE FOR RECENT SOCIOLOGY PHDS

How does the market for new PhD sociologists compare to those in other fields? Table 1 shows that the recent cohort of sociology PhDs experienced a modest unemployment rate of 3.4 percent during the week of October 13, 1997, somewhat higher than economics at 2.3 percent, but noticeably lower than political

Permanent Position: Not Tenure-Track or No Tenure-Track at Permanent Position: Institution Tenured or Tenure-Track 10.1% 54.5% Temporary Position: Postdoctoral **Appointment** . 13.7% Temporary Position: Not Postdoctoral Total N = 324 Appointment 21.7%

Figure 1. Type of Position of Recent Sociology PhDs in Academic Settings

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

science at 7.0 percent. About one-third of these new sociologists reported being in temporary positions at this early stage of their careers, a lower proportion than the average for the remaining disciplines. About 8 percent reported being employed part-time. Here again the proportion is higher for sociologists than for economists, but lower than that for political scientists. Table 1 also shows that sociology has a larger share of

new doctoral recipients employed in the academy than any of the other 13 scientific fields participating in this multidisciplinary project—overall, better than 80 percent of new doctoral recipients found work within the academy.

Not all sociologists working in the academy land faculty jobs or permanent positions. Figure 1 shows that, among those employed in higher educational settings (n=324), slightly more than half had tenure-track jobs. Another 10 percent obtained nonfaculty career positions in colleges or universities. Postdoctoral positions (14 percent) traditionally have provided additional training after receipt of the doctorate. About one out of five were in temporary, non postdoctoral positions. Future research will tell us whether temporary or postdoctoral positions or both serve as a bridge to tenure-track appointments.

Both the absolute number and the proportion of doctorates working in nonacademic posts were quite small (n=61). These graduates were somewhat more likely to work in the private or nonprofit sectors than in government.

## PLACEMENTS IN THE ACADEMIC AND NONACADEMIC WORKPLACE

### **Demographic Profile**

When we compared those holding academic positions with those employed outside the academy, we found few significant differences in their average age (mid-30s), gender (about 6 out of 10 were women), marital status (about 7 out of 10 were married), or presence of children in the home (about one-third lived with children). Though not statistically significant, white doctoral recipients were slightly more likely to work in an academic setting than were other racial groups (84 percent of whites and 77 percent of African Americans and Asians). There were no significant differences in the prestige of the doctoral university attended between all academics and nonacademics—about one-fifth in each group attended high-prestige schools, and one-third of each group attended the low-prestige schools. There were, however, significant differences between nonacademics and those academics who were in tenure-track or postdoctoral positions. The latter attended high-prestige universities and were significantly younger than the former.4

### **Effects of the Graduate School Experience**

Formal training. The graduate school experience varied considerably for new PhDs who entered academic and nonacademic workplaces. For most graduate students, research and teaching assistantships were a key component of their professional training as well as a mechanism for funding their education. In this cohort, most respondents received some type of assistantship during their training: 75 percent received teaching assistantships, 62 percent received research assistantships, and 51 percent received fellowships. PhD graduates working in the academy were significantly more likely than those in nonacademic jobs to have received teaching assistantships during their graduate study (82 percent versus 71

percent) and were more likely to have received a fellowship (47 percent versus 33 percent). Those employed in the nonacademic workplace after graduate school were more likely to have worked outside of the academy while in graduate school: Almost half of nonacademics reported this to be the case, compared to less than one-third of the academics.

Exposure to opportunities outside graduate school. Beyond their formal training, academics and nonacademics differed also in their training while in graduate school. Nonacademics were significantly less likely to respond that they had opportunities to present research outside the university setting and that they had effective training as a teacher. Nonacademics were also somewhat less likely to receive faculty assistance in publishing (but this difference was not significant).

Graduate training programs may be aspiring to expand their conceptions of career trajectories for graduates, but the primary emphasis remains on the academic workplace. Some 85 percent of the PhD graduates indicated that faculty had not encouraged them to pursue nonacademic jobs, and 63 percent reported that they had not had opportunities to interact with nonacademic professionals. These numbers were not significantly different for those working in the academy and those who accepted nonacademic employment. Only 18 percent of those in nonacademic careers and 13 percent of those employed inside the academy were encouraged to pursue such jobs.

### **Job Search Methods**

Recent PhD sociologists employed in nonacademic institutions were much more likely than those employed in the academy to have been working in their jobs prior to, or while attending, graduate school. Consequently, the nonacademics spent significantly less time looking for a job and were more likely to have some employee benefits to help fund their PhD training (17 percent versus 5 percent for those inside the academy). For those nonacademics who did search for jobs, there were significant differences in the methods used between them and those

<sup>&</sup>lt;sup>4</sup> Prestige scores were based on U.S. News & World Report's prestige ranking of the recipient's BA and PhD granting institutions and the National Research Council's Doctoral Program in the U.S. measure of "distinguished" graduate sociology departments.

who gained employment in academic workplaces.

The survey asked respondents to indicate which of 15 job search methods they had used while on the job market. Figure 2 shows the results. The ASA *Employment Bulletin* was significantly more likely to be used by those who found academic placements (83 percent versus 52 percent of nonacademics). Most advertisers in the *Employment* Bulletin are academic institutions, so this finding is hardly surprising. The second most popular job search method for academics was faculty advisors or the Chronicle of Higher Education. Each of these resources was used by

almost half of those who landed jobs in the academy. In contrast, the most common job search method for nonacademics was informal networks (colleagues and friends); the *Employment Bulletin* was second. Those who found nonacademic employment were more likely to use newspaper ads (42 versus 27 percent) and electronic resources (33 versus 20 percent of academics). Faculty advisors were used by half of those who obtained jobs in the academy but by only one-third of those in nonacademic jobs, possibly because faculty advisors were not well connected to resources, networks, and potential employers outside of the academy.

# WORKLIFE IN ACADEMIC AND NONACADEMIC SETTINGS Job Attributes

Salary. One clear difference between academic and nonacademic careers is salary. Nonacademic careers typically provide higher salaries than academic careers. Table 2 shows the 1998 expected salaries of those in the cohort. Earnings were significantly different for these two groups. Fewer nonacademics than academics were found at the low end of the salary scale—28 percent of academics compared to only 20 percent of nonacade

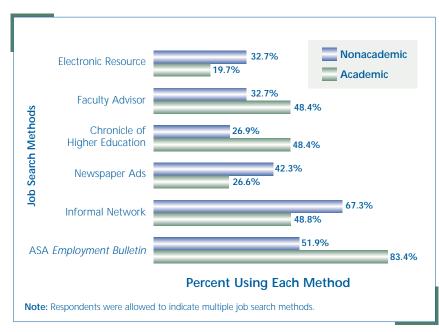


Figure 2. Use of Selected Job Search Methods Among Recent Sociology PhDs in Academic and Nonacademic Settings

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

mics expected to earn less than \$35,000. In contrast, almost half of nonacademics expected to earn more than \$50,000 compared to only 20 percent of academics. Several respondents working in nonacademic settings noted low salaries within the academy as a factor in their employment choice. With the average age of graduates being 35, and over two-thirds being married (one-third with children), the average academic salary of \$37,000 may not seem sufficient to all new doctorates.

Table 2. Expected 1998 Salary Among Recent PhDs in Academic and Nonacademic Settings

	Percent			
Expected Salary 1998	Academic (N=324)	Nonacademic (N=61)		
Less than \$35,000	28.1	19.7		
\$35,000-\$39,000	20.1	11.5		
\$40,000-\$44,999	18.8	11.5		
\$45,000-\$49,999	13.6	9.8		
\$50,000+	19.5	47.5		
Total	100.0	100.0		

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

**Note:** The difference between the expected salaries of academics and nonacademics was significant at p<.001 (two-tailed tests). The test of significance determines the probability that the difference between academics and nonacademics did not occur by chance alone.

Pay for new Assistant Professors is not sufficient for middle-aged professionals. Most sociology Assistant Professors earn mid-30's which is not commensurate with the amount of time, energy, and money it takes to earn a PhD.

(39-year-old male working in county government)

Work schedule. Nonacademic jobs may also provide more predictable work schedules than academic jobs. Nonacademics were more likely to work a 40-hour week (54 percent) than were their academic counterparts (31 percent) who were more likely to work 50 hours per week or more (39 percent of academics versus 26 percent of nonacademics). For new PhDs who are juggling careers and children, higher salaries and regular hours of work may be important factors in job selection. Sociologists in nonacademic jobs were more likely than were their academic counterparts to have considered family issues and spouses' employment in their job choices. One respondent, who worked for a state health department, described some of the constraints faced by dual-career families:

I felt both my partner and myself have had to compromise our career objectives in order to maintain our family life. I will be starting a tenure-track position this fall. It will be a two-hour commute (by car, one way), and I consider myself lucky to have found something this close. (29-year-old woman)

Multiple jobs and work demands. As can be seen in Figure 3, the vast majority of all new PhDs hold only one job, regardless of their workplace settings (87 percent of academics and 74 percent of nonacademics). Nonacademics were also more likely than academics to report holding two or more jobs, perhaps made easier by the approximately "9-to-5" workweek on their primary job. Only a miniscule number of new PhDs held three or more jobs simultaneously. These findings do not support the prevalent notion that large numbers of new PhDs in sociology are patching together several jobs in order to earn a living. For some, holding more than one job provided added benefits:

Currently, I hold two positions: postdoc and a consultant position on a funded research project.

Together, the two positions provide adequate money but excellent research/publishing opportunities.

I'm very satisfied with my current situation.

(31-year-old male)

Although nonacademics were more likely to have more than one job, their total hours of work from all jobs did not exceed the total hours of work put in by academics (both had means of 46 hours), and only a small proportion worked 60 or more hours per week.

### **Professional Networks**

In the relatively short period of time since being awarded their PhDs, differences in the strength

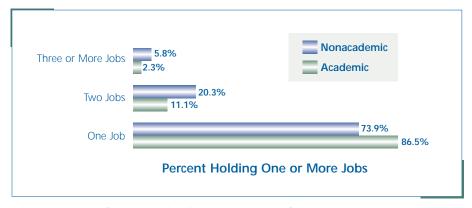


Figure 3. Employment in One or More Jobs Among Recent Sociology PhDs in Academic and Nonacademic Settings

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

of networks formed by each group emerged.<sup>5</sup> On balance, those employed outside of the academy saw themselves as having weaker academic networks available to them than did those employed in academic settings. As can be seen in Figure 4, when we grouped available networks into three categories, nonacademics were almost twice as likely as academics to have low network scores (31 versus 18 percent). These differences may, in part, be due to the fact that many who found employment outside of the academy were employed during graduate school and thus may have been less able to nurture the development of strong academic ties. One respondent, the owner of a consulting business, discussed this situation:

I combined a PhD with an MBA which is attractive in the business world. I would have preferred to make many more academic/faculty contacts but between family, children, work and pursuing a PhD, there was not time to build other networks (45-year-old woman)

Both academics and nonacademics saw the value of networks in their professional lives. The majority of sociologists in both groups were members of two to three professional societies (about 60 percent). Those employed outside the academy were significantly less likely than those employed within to be members of the American Sociological Association, the principal professional association for sociologists (60 percent versus 76 percent). The total number of their professional memberships suggests that nonacademics were part of other networks, however.

### **Productivity**

At this early stage of their careers, the average number of publications was only slightly higher for those employed inside the academy (a mean of 2.7 publications) than for those employed outside the academy

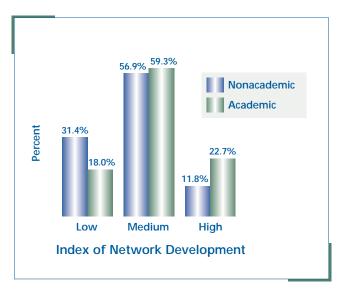


Figure 4. Professional Network Development Among Recent Sociology PhDs in Academic and Nonacademic Settings

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

(a mean of 2.4 publications).<sup>6</sup> A higher percentage of nonacademics published technical or scholarly reports, while a higher percentage of those employed in the academy published articles in peerreviewed journals. These differences suggest that academics and nonacademics may be taking different paths in their written productivity. Alternatively, at this early stage, publications may simply reflect productivity during their graduate school careers.

Presenting research papers at professional conferences and meetings provides another measure of productivity. Those in academic settings were significantly more likely to present papers at national or regional meetings, with 80 percent presenting at least one paper. In contrast, almost half of all sociologists in nonacademic positions reported presenting no papers at professional meetings. Close to three-

<sup>&</sup>lt;sup>5</sup> Network scores were measured by how strongly respondents agreed that contacts made with peers, faculty, and other sociologists during graduate school would help them professionally, and how strongly they agreed that they had a good deal of contact with their faculty mentors since graduation. Scores ranged from 3 to 15; higher numbers represent stronger networks.

<sup>&</sup>lt;sup>6</sup> In an effort to more adequately represent "publication productivity" for those in the academic and nonacademic sector, we measured publications in a variety of categories, including: peer-reviewed and non peer-reviewed journals, book chapters, scholarly monographs, technical reports, and trade books. We also measured productivity by the number of presentations given at various professional meetings, including, but not limited to, sociological societies.

quarters of the nonacademics who did present papers, presented them at professional society meetings other than ASA or regional sociology meetings. These differences may correspond to differences in professional memberships and networks.

#### Job Satisfaction

Overall, as they began their careers, academics were more satisfied with their jobs than were nonacademics.<sup>7</sup> As one new academic stated:

I know that my employment experience represents luck and a good match. I found a school where both they and I felt a common sense of purpose. (34-year-old female, tenure-track assistant professor at a four-year college)

It is important to note that we also found significant differences in satisfaction within the academy between those who held tenure-track or postdoctoral positions and those who held temporary positions. The former were almost twice as likely as the latter to report high job satisfaction (49 percent versus 27 percent). In fact, those with temporary academic

positions looked much more like their nonacademic counterparts: They were even less likely to be highly satisfied with their positions than their nonacademic counterparts (27 percent versus 32 percent), although they were less likely to be dissatisfied.

On some issues there were no significant differences between those employed in the academy and those employed outside. More than half of both groups were satisfied or very satisfied with the salary and benefit levels of their jobs. As was the case for job satisfaction, there were also significant differences between academics in their levels of salary and benefits. Those employed in temporary, non postdoctoral academic positions were the least satisfied with their salary and benefits (only 30 percent were satisfied or very satisfied). Likewise, those employed in temporary, non postdoctoral academic positions were the least satisfied with the institutional resources available to them compared to those in tenure-track or post-doctoral positions or those in nonacademic positions.

Figure 5 shows the degree of satisfaction with some selected aspects of professional identity. Generally,

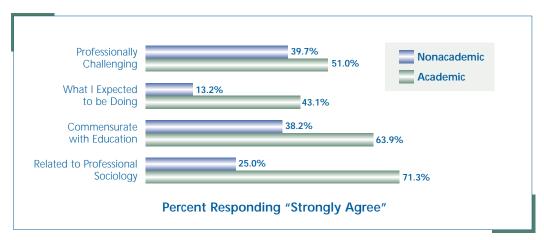


Figure 5. Satisfaction with Various Aspects of Primary Employment Among Recent Sociology PhDs in Academic and Nonacademic Settings

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

<sup>&</sup>lt;sup>7</sup> We created several different indicators of job satisfaction, including questions about satisfaction with the salary and benefits, employer support for professional productivity, the challenge of the work, the level of professional guidance, the amount of institutional resources, the respondent's co-workers, whether the job was related to professional sociology, and whether it was commensurate with their education and training.

we found significant differences between those employed inside and outside the academy. Those employed in the academy were almost three times more likely than nonacademics to "strongly agree" that their positions were related to professional sociology, and almost twice as likely to strongly agree that their positions were commensurate with their education and training. In contrast to the satisfaction of those employed inside the academy, only 13 percent of those in nonacademic jobs reported that their position was what they expected to be doing at the start of their PhD training (versus 43 percent of academics). These findings suggest that at least in the perceptions of this group of new PhDs, their nonacademic jobs did not meet their expectations for a position as a professional sociologist. On this set of items we find that the satisfaction levels of academics in temporary, non postdoctoral positions were close to those of the more privileged academics. Only in terms of their rating of their position's professional challenge did the temporary academics appear to be more like the nonacademics.

## Career Steps from Academic and Nonacademic Settings

These new PhDs are at a relatively mobile time in their careers; they are seeking to find better job matches and improve their job status. At the time of the interview, one-third of the cohort were looking for new positions, regardless of whether they were employed inside or outside the academy. For half of the academics and half of the nonacademics, their October 13, 1997 position was not their first choice, although academics were significantly more satisfied in their positions. During the six to nine months between October 13, 1997 and the time in 1998 when they answered the questionnaire, a significantly higher percentage of nonacademics than academics had already switched jobs (26 percent versus 11 percent).

Career aspirations. Of those for whom the October 13, 1997 job was not their first choice, almost 9 out of 10 academics and 7 out of 10 nonacademics sought employment in an academic

institution. The most coveted position for both groups was a tenure-track academic job. More than 80 percent wanted either a permanent faculty position or a permanent faculty position at a different institution. Only 4 percent of those in academic positions expressed a desire to be in a research job in an applied setting rather than in an academic job. Fully half of the nonacademics for whom their October 13, 1997 job was not their first choice wanted a tenure-track academic job. The remainder of nonacademics was interested in research or administrative positions within the academy, or positions similar to their own in different nonacademic settings.

Transitions to next jobs. Those nonacademics who preferred academic employment appeared to be having a difficult time making this transition. Combining all academic job possibilities (universities, colleges, community colleges), only 25 percent of nonacademics who switched jobs were successful in obtaining academic positions. Of these nonacademics, only 13 percent went on to a university offering a graduate degree in sociology. In contrast, 44 percent shifted to a job in the for-profit business sector. Of the small percentage of academics that changed jobs, 85 percent found other academic positions: 70 percent obtained a faculty position and 15 percent obtained a research job in the academy. Fully 57 percent of these academics went on to universities offering graduate degrees in sociology. One new PhD, working out of the academy, described his frustration in trying to make the transition to an academic job:

I pursued another career. I use my sociology training. Now, although successful, I found it hard to transition back into an academic position. (46-year-old male working in telecommunications)

Changes in professional networks, lack of institutional resources, less time for research and writing, and less participation in the principal professional organization (ASA) may all be factors that make the shift from a temporary or nonacademic position to a tenure-track post increasingly more difficult.

### **CONCLUSIONS AND FUTURE RESEARCH**

This research brief shows a relatively favorable job market and low unemployment for a cohort of recent sociology PhDs, who received their degrees between July 1, 1996 and August 31, 1997. This cohort of new sociologists were more likely than their peers in other disciplines to be employed in the academy, the traditional culmination of PhD training across disciplines. Despite what might be untapped potential for a broader set of career alternatives, a significant majority of these recent PhDs aspired to academic careers, regardless of the jobs that they actually landed. New PhDs employed in the academy (including those in temporary positions) were significantly more likely to believe that their jobs called upon the skills they learned in graduate school and were commensurate with their education and training than were their peers employed in nonacademic settings. In short, new PhDs in the academy appeared to be doing what they considered to be "professional sociology." Those employed in non tenure-track positions were less likely than those employed outside the academy to be satisfied with the salaries, resources, and benefits that they received.

Data from this initial survey provide important "baseline" information about the career paths of new doctoral recipients in sociology. This analysis suggests many avenues for further research as we follow this cohort's career trajectories. With almost one-half of the new sociologists employed in the academy holding non tenure-track jobs (including postdoctoral, temporary, and permanent positions such as administrative posts), a closer examination of whether these positions provide a bridge to permanent faculty positions will be important. The low success rate transitioning from positions outside to inside the academy also needs further examination.

These findings indicate that efforts to increase the critical mass of sociologists outside the academy have not yet occurred. This effort is probably desirable whether the current market forces within the academy are positive for sociologists or lead to further restructuring. Expanding employment possibilities may be essential if sociological skills are to be a genuine presence and esteemed outside the academy.

By Roberta M. Spalter-Roth, Jan Thomas, and Felice J. Levine. Graphics prepared by Andrew Sutter.



AMERICAN SOCIOLOGICAL ASSOCIATION

1307 New York Avenue NW Suite 700 Washington, DC 20005-4701 FIRST CLASS MAIL U.S. POSTAGE PAID PERMIT NO. 504 WASHINGTON, DC