AMERICAN SOCIOLOGICAL ASSOCIATION DEPARTMENT OF RESEARCH AND DEVELOPMENT

Decreasing the Leak from the Sociology Pipeline:

SOCIAL AND CULTURAL CAPITAL TO ENHANCE THE POST-BACCALAUREATE SOCIOLOGY CAREER

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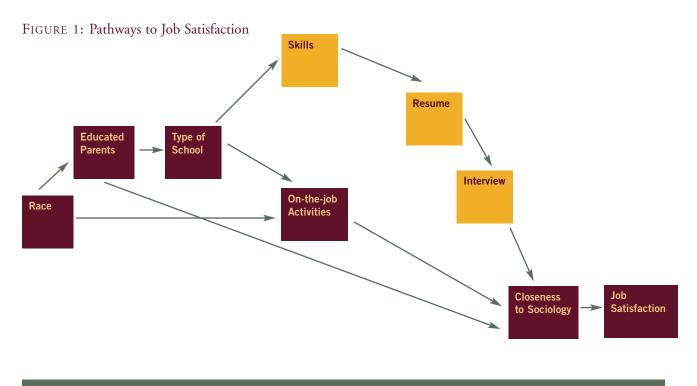
Many sociology departments and their faculties are encouraged to create learning activities for their students that take place outside of the traditional classroom and devote considerable time to these efforts. Are these activities available to all groups of students and, if available, do most students participate in these activities? And, do extra-curricular activities designed to enhance students' social and cultural capital increase their likelihood of obtaining postbaccalaureate jobs related to their undergraduate major? These questions are addressed in this third in a series of research briefs describing career pathways of sociology majors who graduated in 2005.

Earlier briefs document that respondents in ASA's study *What Can I Do with a Bachelor's Degree in Sociology?* report choosing their sociology major because they wanted to understand or change society rather than because they expected the major to lead directly to a career. Nevertheless, more than 80 percent entered the paid labor force within 18 months of graduation: 60 percent held jobs exclusively and an additional 22 percent both held jobs and attended graduate school.

We found in a previous brief that learning sociological concepts, as well as statistical and writing skills, was related to using these skills on the job, especially if students listed these skills on their resumes and spoke about them in interviews. This is important because the extent to which respondents perceive that their jobs are related to their degrees predicts satisfaction and presumably increases the likelihood that graduates will remain in the field of sociology. See the top pathway illustrated in Figure 1. This brief examines other facets of learning that may not be taught in the traditional classroom. Skills associated with on-the-job training and networking, scholarly socialization, and mentoring are designed to increase students' social and cultural capital. In this brief, social capital refers to direct or indirect ties and networks that result in desired jobs, and cultural capital refers to insider knowledge gained that allows individuals to succeed in securing jobs compared to those who do not have this knowledge.

Graduates can take advantage of the social and cultural capital that parents provide, resulting in a successful search for positions that reflect the graduates' education in sociology. If parents obtain a baccalaureate degree or more, graduates' job success is more likely, because with higher education comes contacts, situational knowledge, and strategies for professional job searches and employment. But, this parental capital is not equally distributed. Chances are that sociology majors who are members of underrepresented minorities, whose parents have less education, may substitute other extra-classroom means of gaining social and cultural capital.

Specifically, this brief describes a pathway from parents' education to students' participation in activities that promote social and cultural capital, via race and type of school, to the closeness of their jobs to their sociological studies. This pathway is highlighted in the lower section of Figure 1. We ask whether those graduates whose parents have less human capital can obtain jobs that match their sociological skills by engaging in extraclassroom activities.



BACKGROUND

The class of 2005 had varying reasons for majoring in sociology. Some were careerists, some were idealists, and for some, their first course attracted them to sociology. There were, however, no significant differences between these reasons for majoring and whether a post-graduation job was closely related to sociology. At the time of the last survey in 2007, 20 percent of the graduates agreed strongly, and an additional 48 percent agreed somewhat, that the positions they held reflected the skills and concepts they learned as undergraduates. The jobs that were perceived as closest to sociology included social science researcher, social service provider, educational counselor, teacher or librarian. The remaining 31 percent were employed in positions that they believed were not connected closely to the curriculum of the sociology major¹. The lack of a match between sociological skills learned as an undergraduate and employment in a job that makes use of these skills results in an early leak in the sociology pipeline for

these 3 out of 10 students. These respondents were employed primarily as clerical and service workers.

As noted in Pathways to Job Satisfaction, the match is significantly enhanced when students list skills on their resumes and if they discuss them at job interviews. Those respondents who listed at least one skill on a resume were more than twice as likely to be employed in a job that they strongly agreed was close to sociology (69 percent compared to 31 percent, respectively). Of those respondents who discussed at least one sociological skill at a job interview, 64 percent obtained a job that was close to sociology compared to 36 percent who did not. More than half of those respondents (57 percent) who did not discuss their skills during an interview did not find a job close to sociology. Students in jobs close to sociology were nearly twice as likely to express high job satisfaction as students who reported that their job was not close to their sociology curriculum.

¹see What Are they Doing with a Bachelor's Degree in Sociology? At http://www.asanet.org/galleries/Research/ASAResearchBrief_corrections.pdf

FINDINGS

PARTICIPATION

Students were asked whether they participated in 10 specific types of activities designed to enhance social and cultural capital. The SPSS CATPCA scaling procedure was used to determine whether these activities would cluster into distinctive indexes, each representing a type of social or cultural capital. We found that the activities formed three distinct clusters described below.

- On-the-job training and job networks. These five items included leadership training, participating in internships, engaging in community activities, taking part in service learning programs, and attending job fairs. Students gain social and cultural capital by practicing their future profession, developing networks of employers, learning to work with others in groups to complete work assignments, and relating to community groups.
- 2. Scholarly networking and socialization. The three items included in this cluster are membership in a sociology club, participating in the sociological honorary society Alpha Kappa Delta, and attending state, regional, or national sociological meetings. These activities build social and cultural capital, by developing scholarly networks and teaching students how to present scholarly work and behave at professional meetings.
- 3. Mentoring activities. These activities, including student participation in mentoring programs and in faculty research, build social and cultural capital by playing a key role in the dissemination of formal and informal knowledge about disciplinary practices.

Figure 2 provides summary data on the number of extra-classroom activities in which students participated. We find that involvement is widespread with almost 80 percent of all respondents participating in at least one activity and with nearly one quarter (23.8 percent) taking part in four or more activities.

Figure 3 highlights the predominance of on-the-job training/networking activities. The figure provides the percentage of students taking part in each of the three clusters of activities discussed above. The figure demonstrates that 65.8 percent of students engaged in at least one type of on-the-job training/ networking; 30.2 percent participated in scholarly socialization, and 28.8 took part in mentoring activities.

SPECIFIC ACTIVITIES

Table 1 provides the percent of all students who engage in each of these 10 specific activities, organized into the three broad clusters. We find that activities associated with on-the-job training and networking are more common than those associated with scholarly socialization and mentoring activities. More than 30 percent of students report that they have participated in leadership programs and internships. At least 20 percent report attending a job fair, taking part in a service learning program, or engaging in a community activity. While about one quarter of students do report involvement with a sociology club, only one student in seven was part of an Honors Program, and only one in ten attended a professional sociology meeting. Twenty percent of students report that they had a mentor while an undergraduate, while 15 percent worked with faculty on research.

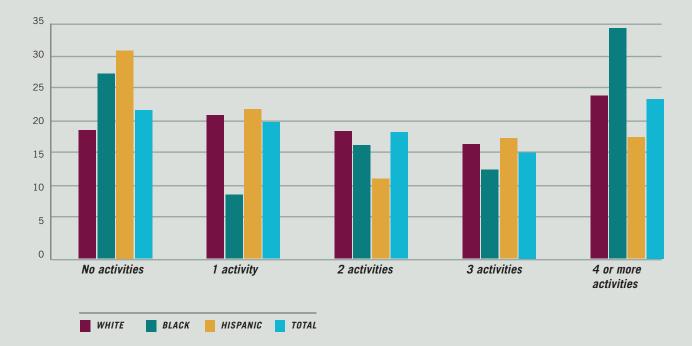


FIGURE 2: Race/Ethnicity Impacts Number of Activities Participated

FIGURE 3: Participation in Broad Categories: Percent participating in at least one activity within each category

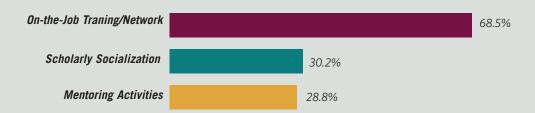


TABLE 1. Activity Participation by Race (in percents)

ON-THE-JOB TRAINING AND NETWORKING White Black TOTAL Hispanic Leadership Program 36.5 41.9 26.3 35.5 Internship 34.3 32.9 32.1 32.9 Community activity 25.6 38.4 26.8 27.0 Service Learning Program 35.6 26.5 23.2 26.6 Job Fair 20.5 27.4 10.5 19.8 SCHOLARLY SOCIALIZATION -_ _ _ . .

	White	Black	Hispanic	TOTAL
Sociology Club	26.2	29.7	17.9	25.5
Honors Program	15.8	13.5	10.7	14.7
Professional Association	9.9	13.7	7.0	9.6
MENTORING ACTIVITIES				
	White	Black	Hispanic	TOTAL
Mentoring	21.7	27.0	5.4	20.1
Faculty Research	13.3	24.7	12.5	14.6

Specific Activities by Race and Ethnicity

There were significant variations by race and ethnicity in the types of extra-classroom activities in which respondents participated as undergraduates (see Table 1). These findings may mean that activities were differentially available to different groups of students. Blacks were the most likely to participate in on-the-job training and networking activities, with the exception of internships, an activity in which both blacks and Hispanics were about as likely to participate. Hispanics were the least likely to participate in on-the-job training and networking activities, with the exception of internships. They were also less likely to participate in other activities that increase social and cultural capital. For example, only 18 percent of Hispanics reported participating in sociology clubs, compared to 26 percent of whites and nearly 30 percent of blacks. An even larger gap existed in numbers receiving mentoring with 5 percent of Hispanics, compared to 22 percent of whites and 27 percent of blacks. In a previous report we found that black students were more likely than others to major in sociology because they wanted to change society, on the one hand, and to have a career, on the other. They participated in extracurricular activities that either reflected these interests or existed in the departments at the schools they attended.

In terms of overall participation, Figure 2 shows that the relatively small number of African Americans who participated in the survey were the most likely to participate in four or more activities (34.5 percent) compared to Hispanics or whites. Hispanics were the least likely of these groups to participate in at least one activity and whites were the most likely (69 percent and 81 percent, respectively).

Specific Activities by Type of School

The type of school that respondents attended as undergraduates is significantly related to participation in activities and programs that build students' social and cultural capital (Table 2). Overall, respondents who earned their degree from master's comprehensive schools are the most likely to participate in on-the-job training and networking activities. Respondents who attended baccalaureate-only programs are most likely to participate in activities aimed at scholarly socialization and mentoring. Respondents who attended research and doctoral universities are least likely to participate in these latter two types of activities. These differential rates of participation may reflect the differential availability of extra-classroom activities at different types of institutions of higher education. Although the percentage of respondents that participated in leadership programs was similar in master's comprehensive and baccalaureate-only institutions, respondents from master's comprehensive schools were more than twice as likely to participate in internships (44 percent compared to 19 percent, respectively, with 28 percent of respondents from research and doctoral universities participating in this activity). Nearly twice as many graduates of master's comprehensive as compared with baccalaureate-only institutions, participated in community activities. About 5 percent fewer respondents from research and doctoral universities engaged in these activities compared to respondents from master's comprehensive institutions. Overall, doctoral school graduates were also less likely to participate in any social or cultural capital-building activities. In all cases, only a relatively small percentage of respondents noted that they had participated in a faculty member's research, with the smallest percentage attending research and doctoral universities. This finding is surprising since it is generally assumed that faculty at research and doctoral schools are most likely to be engaged in their own research. Perhaps because they have graduate students, these faculty members do not involve undergraduates in research activities.

Specific Activities by Parent's Education

We expect that on-the-job training, employer networking, scholarly socialization, and participation in mentoring programs or faculty research could act as

ON-THE-JOB TRAINING AND NETWORKING					
	Doctorals	Masters	Baccalaureates		
Leadership Program	30.6	39.3	42.4		
Internship	27.9	43.7	18.5		
Community activity	26.0	29.8	16.1		
Service Learning Program	25.0	30.3	19.4		
Job Fair	16.3	29.4	15.2		
SCHOLARLY SOCIALIZATION					
	Doctorals	Masters	Baccalaureates		
Sociology Club	15.0	29.0	43.0		
Honors Program	9.3	16.0	20.7		
Professional Association	6.3	7.9	18.5		
MENTORING ACTIVITIES					
	Doctorals	Masters	Baccalaureates		
Mentoring	15.6	20.1	32.3		
			02.0		
Faculty Research	12.0	13.0	20.4		

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TABLE 3. Activity Participation by Parents' Education (in percents)

	MOM'S EDUCATION		DAD'S EDUCATION			
	Less than BA	Less than BA BA or more		BA or more		
Leadership Program	35.3	35.8	36.9	34.7		
Internship	35.8	29.3	35.0	31.0		
Community activity	28.4	23.5	30.4	21.8		
Service Learning Program	28.7	23.1	27.5	25.1		
Job Fair	23.6	18.7	23.1	18.6		

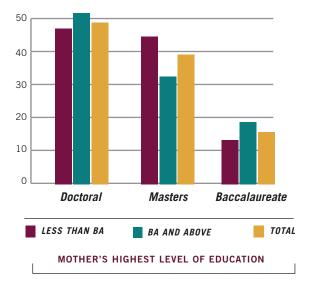
ON-THE-JOB TRAINING AND NETWORKING

SCHOLARLY SOCIALIZATION

	MOM'S El	DUCATION	DAD'S EDUCATION		
	Less than BA	Less than BA BA or more		BA or more	
Sociology Club	22.8	26.5	24.1	24.5	
Honors Program	12.8	14.3	13.4	13.9	
Professional Association	7.2	10.6	6.6	11.5	

MENTORING ACTIVITIES

	MOM'S EL	DUCATION	DAD'S EDUCATION		
	Less than BA	Less than BA BA or more		BA or more	
Mentoring	18.6	21.2	18.1	20.7	
Faculty Research	14.3	46.7	13.5	13.9	





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30 20 10 0 Doctoral Masters Baccalaureate TOTAL FATHER'S HIGHEST LEVEL OF EDUCATION

substitutes for parent's lack of human, social, or cultural capital. If our supposition is correct, these extra-classroom activities may be especially important for slightly more than half of the respondents whose mothers (53 percent) and fathers (51 percent) had less than a college degree. Black and Hispanic parents of respondents have less education than white parents and, as a result, might have less knowledge and fewer networks to help their children find jobs that match their sociological training. More than one third (37 percent) of black parents, and slightly more than one quarter (28%) of Hispanic parents have a college education compared to half of white parents. Extraclassroom activities can help students fill the gap in their parent's "insider knowledge."

As expected, majors whose parents earned less than a bachelor's degree were more likely to report participating in on-the-job training and employer networking activities. More than 70 percent of students whose mothers had less than a college degree participated in at least one of these on-the-job training activities compared to 65 percent of those whose mothers had a college degree or more (data not shown). Table 3 shows that mother's education has a marginally significant relationship to internship participation (36 percent of respondents whose mothers did not have a bachelor's degree compared to 29 percent of respondents whose mothers did have a bachelor's degree). There is a statistically significant difference in participation in service learning projects between respondents whose fathers did not graduate from college (30 percent) and those whose fathers did (22 percent).

However, the inverse relationship between parent's education and respondent's participation in extraclassroom activities is not a universal pattern across all three clusters. Respondents' participation in scholarly socialization activities was not related to their parents' level of education. Mothers' level of education was marginally related to respondents' participation in mentoring activities, with greater education related to greater participation. Of the respondents who participated in one of the mentoring activities, 21 percent of respondents' mothers did not graduate from college, compared to 27 percent of mothers who did (data not shown). This was not the case for fathers' education, as the relationship between their education and their children's participation in mentoring activities was not statistically significant.

Type of School by Parent's Education

We also find that the children of parents with less than a bachelor's degree are more likely than those with more educated parents to attend master's comprehensive schools. For example, Figure 4 shows that 43 percent of respondents whose mothers had less than a bachelor's degree attended master's comprehensive schools in contrast to 31 percent of those respondents whose mothers had a bachelor's degree or higher. Those respondents whose mothers or fathers had a bachelor's degree or higher were significantly more likely to attend baccalaureate-only schools (see Figure 4).

PATHWAYS TO PARTICIPATION

While these bivariate relationships are of interest, our next task is to investigate whether race, parent's education, and type of school are associated with participation in extra-classroom activities, particularly those directed at on-the-job training and networking. For the 60 percent of sociology majors who entered the workforce post graduation and did not attend graduate school, we expect those who participated in job training and other networking activities to be African American, to be the children of parents with less than a college education, and to have attended a master's comprehensive school. The number of on-the-job and networking activities in which the respondent participated is the dependent variable in the first logistic regression analysis. The number of these activities is recoded into a dichotomous variable with participation in 0 to 3 activities as one response category and participation in 4 or more activities as the other.

The model presented in Table 4 shows that two of the characteristics that were related to activities in the descriptive analysis are significantly related to participation in activities in the regression analysis—race/ethnicity and type of school. Parent's education

(an antecedent variable) falls out of this multivariate model. Likewise, control variables, such as respondent's Grade Point Average, are not significant in the model.

In particular, African American students were more than twice as likely (Exp(B)=2.208) as whites (the omitted category) to participate in 4 or more on-thejob training and networking activities. This suggests that this group of students did substitute these alternative means of gaining social and cultural capital for the knowledge, contacts, and networks that their parents may lack. As we have seen, white students were more likely to have mothers with more than a college degree. Hispanic respondents who were more likely to have parents with less education than whites were less likely to participate in activities designed to make them more employable in sociology-oriented jobs, although the later finding was not significant.

Respondents from master's comprehensive schools are almost three times as likely (Exp(B)=2.776) as respondents from baccalaureate schools (the omitted category) to participate in 4 or more on-the-job training and networking activities. There was no significant relationship between respondent's participation in 4 activities and attendance at a research or doctoral university. This pattern of participation by different types of schools replicates the findings from the descriptive analysis that respondents who attend master's comprehensive schools were more likely than respondents from baccalaureate or research and doctoral institutions to participate in sociology department extra-classroom activities, especially those focusing on job search and on-the-job training.

CLOSENESS TO SOCIOLOGY

While we can model the pathway to participation in extra-curricular activities, we turn now to the issue of whether such activities are related to gaining employment in a position that respondents perceive as

Variable	Category	Standard Coeff.	S.E.	df	Sig.
Race	White	(Omitted)	(Omitted)	(Omitted)	(Omitted)
	Black	2.208	0.400	1	0.048
	Hispanic	0.508	0.705	1	0.337
	Other	1.116	0.561	1	0.845
Type of school attended	Baccalaureate	(Omitted)	(Omitted)	(Omitted)	(Omitted)
	Masters	2.776	0.498	1	0.040
	Doctoral	1.300	0.513	1	0.609

TABLE 4. On-the-job Activities Regression

TABLE 5. Predicting Jobs Close to Sociology

Variable	Category	Standard Coeff.	S.E.	df	Sig.
Mother's Education	Less than BA degree BA degree and above	1.638	0.223	1	0.027
On the Job Activities Index	0-3 activities 4-5 activities	2.823	0.382	1	0.007

close to sociology. In particular, does employment in a job that respondents perceive as close to the concepts and skills that they were taught in sociology classrooms depend on aspects of family background (outside of an individual's or an institution's control) or can participating in extra-classroom activities act as a substitute for the knowledge and contacts for which level of parent's education is a proxy?

Again, we dichotomize the dependent variable: respondents report that jobs are not close to sociology (including highly related and somewhat related jobs) or that they are not.

Table 5 shows that mother's education is positively and significantly related to respondents' obtaining a job they perceived to match their sociological skills. Mothers who had a baccalaureate degree or more, compared to mothers with less education, may provide the knowledge, contacts, and networks necessary to translate a sociology major into a job in the field. Respondents whose mothers had at least one postsecondary degree were more than one and one-half times as likely (Exp(B) 1.638) as respondents whose mothers had less education to experience a skills match between their major and their job. In other words, respondents whose mothers have less than a baccalaureate degree do not experience a direct path to a job that is close to sociology.

More importantly, participating in on-the-job training activities is almost 3 times as likely to increase the probability that respondents obtain a job in their field (Exp(B) 2.823). Other types of extra-classroom activities, including scholarly socialization and mentoring) were not significantly related to obtaining a job that respondents perceive reflective of what they learned as undergraduate majors. These other activities may instead be significantly related to success in graduate school (the subject of our next brief). Father's education (regardless of level) was not significantly related and fell out of the model as did race/ethnicity, type of school, and respondent's undergraduate GPA.

CONCLUSIONS

Having an educated mother and participating in extra-classroom activities significantly increase the probability of obtaining a job that is close to sociology. Obtaining such a job is important both because such jobs have been shown to be associated with high job satisfaction for sociology majors and because the profession of sociology has an interest in enhancing the sociology pipeline.

Of course, undergraduate students and the institutions they attend cannot affect mothers' educational attainment. Institutions can create extra-curricular learning activities for students, and students can avail themselves of these non-classroom activities that are designed to enhance social and cultural capital. For those respondents who cannot rely on mother's education as a pathway of jobs close to sociology—more likely African American and Hispanic students participation in 4 or more extra-classroom activities offered by sociology departments, especially those included in the on-the-job cluster discussed in this brief, provides an alternative pathway.

African American respondents are the most likely racial and ethnic group to participate in on-the-job training activities, in particular, and Hispanics are least likely to do so. We also found that respondents who attended master's comprehensive institutions are more likely to participate in such activities, perhaps because they are likely to have less-educated parents. These findings suggest that, for those majors who are contemplating going into the labor market after graduation, participating in as many extra-classroom activities as possible make up a practicable pathway to a job in the field of sociology. In addition, findings reporting in an earlier brief demonstrate that these job-oriented students should obtain as many classroom skills as possible, list them on their resumes, and talk about them in job interviews.

The findings reported here also suggest that sociology departments should be aware that the majority of their students have parents with less than a college education and are likely to need additional social and cultural capital in order to obtain jobs related to sociology. This coupled with an understanding that a majority of majors do enter the workforce directly after graduation should spur departments to develop the kinds of extraclassroom activities that enhance students' job search and the sociology pipeline. This brief shows that extraclassroom activities are needed to not only prevent students from dropping out of the pipeline, but also to increase the likelihood of their working at jobs that are close to their sociological training. In this way, the undergraduate sociology major can become more competitive with vocationally-oriented undergraduate programs, while including the courses and the classroom content that attract students desiring to understand and change society.



The following are links to research briefs and reports produced by the ASA's Department of Research and Development for dissemination in a variety of venues and concerning topics of interest to the discipline and profession. These briefs can be located at <u>http://www.asanet.org/cs/root/leftnav/research and stats/briefs and articles/briefs and articles</u>

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