

# ASA RESEARCH BRIEF

AMERICAN SOCIOLOGICAL ASSOCIATION  
RESEARCH AND DEVELOPMENT DEPARTMENT

March 2007



## Race and Ethnicity in the Sociology Pipeline

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In recent years the metaphor of an “academic pipeline” has been used to describe the transition processes from undergraduate student to full professor and especially for the transitions of women and minorities. Equality in the academic pipeline assumes that the same proportion of each group can be found at each stage. Reductions in group representation at succeeding stages are referred to as “leaks.” The underlying question of this brief is whether the proportion of minorities in sociology stays stable or declines at each stage of the pipeline. If, for example, a leak occurs at the first stage, then the discipline would start with a relatively large number of minorities compared to whites at the undergraduate level, and end with a relatively small number at the full professor level. The result of this scenario is what some have referred to as a “color-line,” full of obstacles for minorities to cross.

Labeling the decreasing number of minorities at each stage “leakage in the pipeline” assumes that obtaining a doctorate and becoming a full professor in the same field as the one in which you received a bachelor’s degree is the preferred outcome of disciplinary training. An alternative outcome is that sociology training, for example, is a pathway to other professions and other types of degrees. In fact, only six percent of recent sociology majors intend to go on to obtain a doctorate in sociology. Instead, they hope to obtain degrees in

education, psychology counseling, applied sociology master’s degrees, and law (with whites over-represented among those hoping to obtain law degrees). Obviously, no one expects all 25,000 sociology bachelor’s degree recipients in 2004 to become full professors.

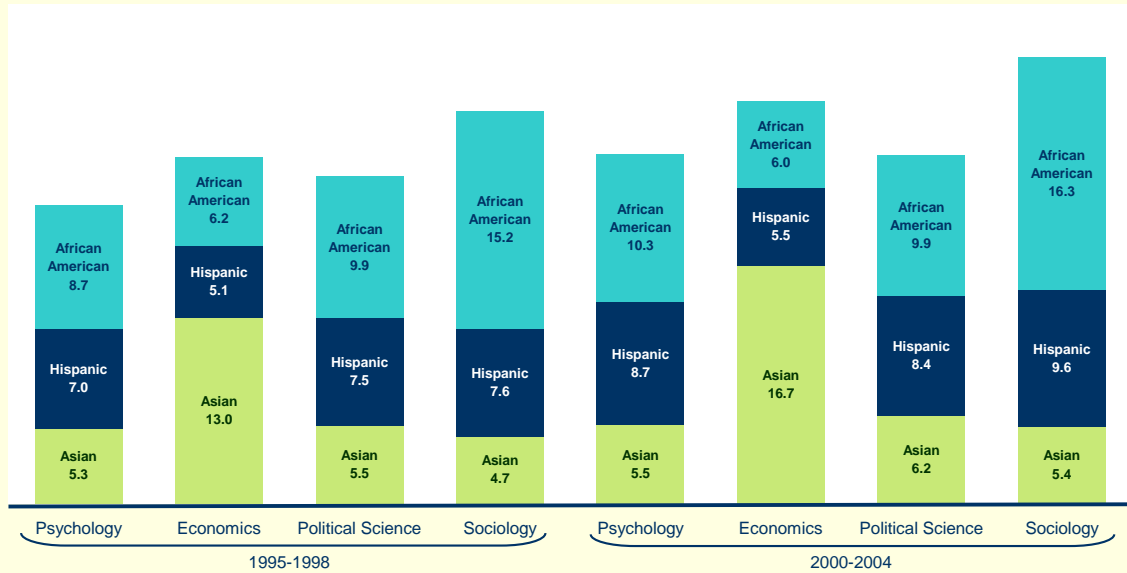
The pipeline issue should be framed in terms of whether there is parity or greater leakage by minorities at different junctures and whether these leakages can be attributed to supply or demand factors (that is, either encouragement, on the one hand, or constraints and obstacles, on the other hand). This brief focuses on points of equality and points of disproportionate leakage throughout the academic careers of minorities and especially African Americans in sociology.

### FINDINGS

About 16 percent of all sociology bachelor’s degree recipients in 2004 were African Americans, higher than the percent of African Americans in the U.S. population. For every one African American recipient there were four white recipients. The percentage of minorities (African Americans, Hispanics, and Asians), and especially the percentage of African Americans, receiving bachelor’s degrees was higher in sociology than in the other behavioral and social sciences (Figure 1).

Figure 1

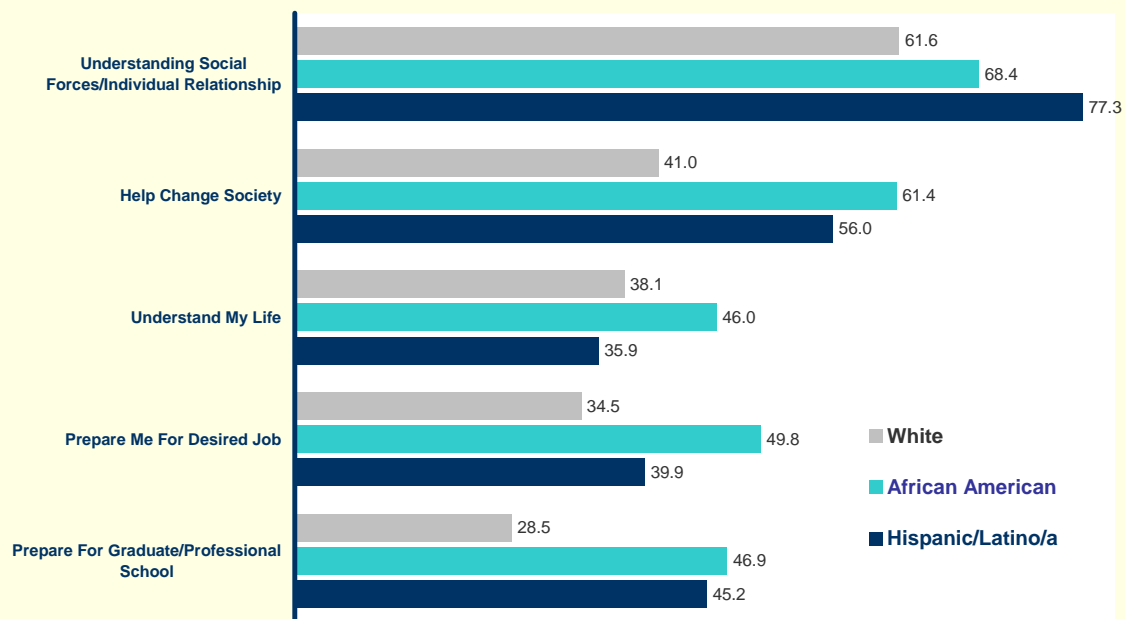
**Baccalaureate Degrees Awarded to Selected Minority Groups by Discipline: 1995-2004**  
(Percent of All Bachelor's Degrees Awarded)



Source: U.S. Department of Education, National Center for Education Statistics (NCES), *Integrated Postsecondary Education Data System (IPEDS) Completions, 1995-2004* (Washington, DC: NCES, 2006). Retrieved from <http://caspar.nsf.gov> (October 26, 2006).

Figure 2

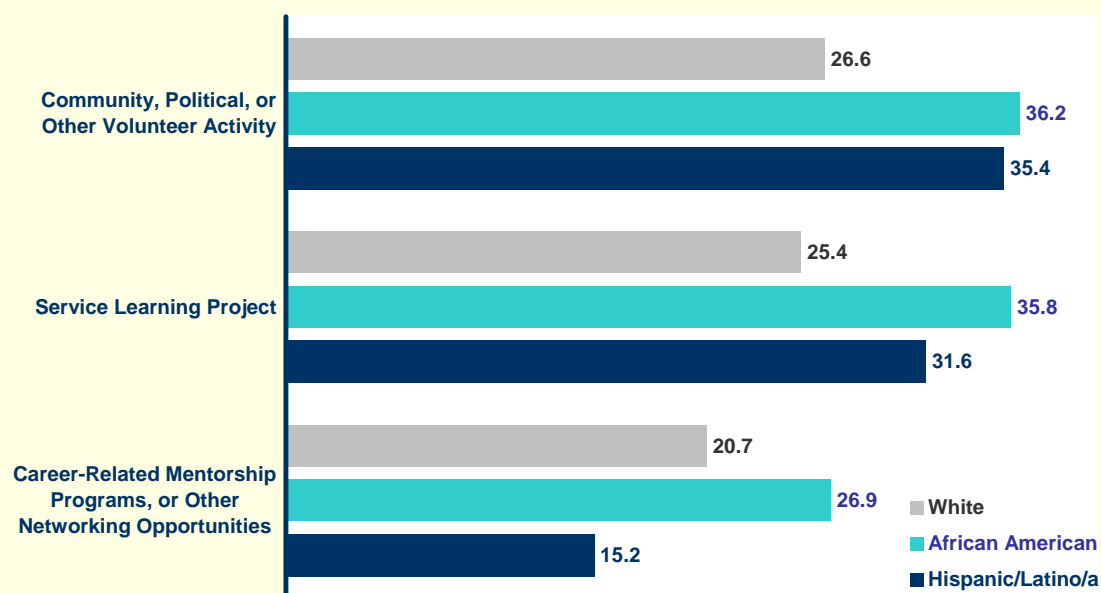
**Significant Differences in the Reasons for Majoring in Sociology by Race and Ethnicity: 2005**  
(Percent Strongly Agreeing; Weighted Data)



Source: American Sociological Association, Research and Development Department, *What Can I Do With a Bachelors in Sociology? A National Survey of Seniors Majoring in Sociology* (Washington, DC:ASA, 2005).

Figure 3

Significant Differences in Three Learning Activities by Race and Ethnicity: 2005  
(Percent Participating as Part of Sociology Major; Weighted Data)



Source: American Sociological Association, Research and Development Department, *What Can I Do With a Bachelor's Degree in Sociology? A National Survey of Seniors Majoring in Sociology* (Washington, DC:ASA, 2005).

## What Is It About Sociology That Encourages African Americans To Major?

Data from the American Sociological Association (ASA)'s recent report *What Can I Do with a Bachelor's Degree in Sociology?*, a survey of about 1,700 senior majors in sociology, finds that significantly more African Americans were likely to state that they majored in sociology because they gained a sociological perspective that can help them understand the relation between history and biography (Figure 2). They agreed that the knowledge they gained will help them understand the social forces and individual relationships and, as a result, to change society. Along with changing society, African American majors were also more likely to look to their sociological training to prepare them for careers (though not necessarily in sociology). African Americans were the most likely group of senior majors to participate in activities that can result both in changing society (through community, political or volunteer activity) as

well as activities that can lead to future careers and graduate school—that is, career-related mentorship programs (Figure 3).

African Americans, as with all other groups, did not major in sociology for convenience reasons, for example, because the major requires fewer credit hours (data not shown).

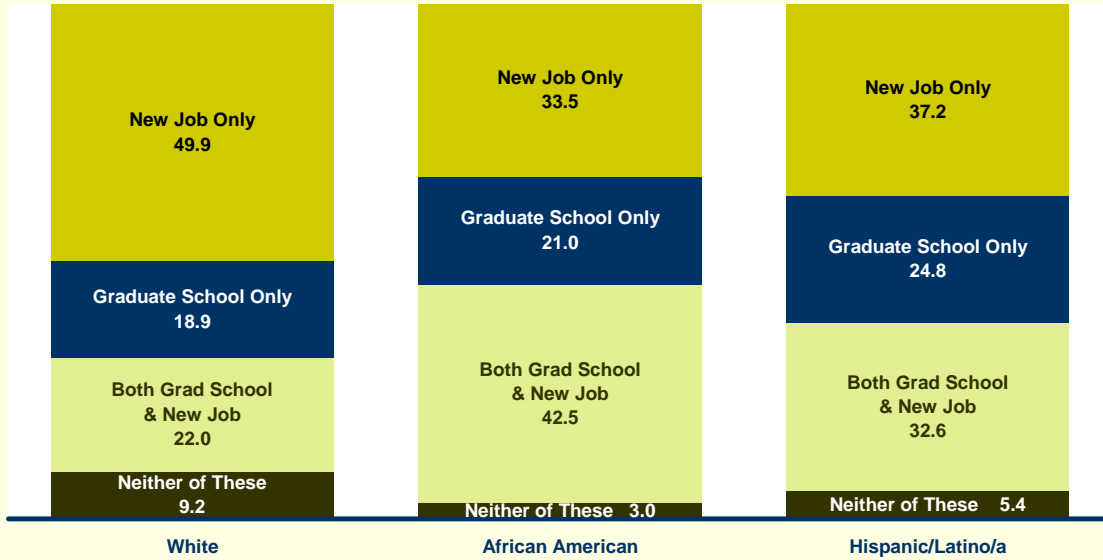
When contemplating their future plans, African Americans were the most likely of all racial and ethnic groups to envision simultaneously attending graduate school and working, and the least likely to work at a new job alone (Figure 4). In fact, they were the most likely to expect to go on to graduate school, either full or part-time.

## Graduate School Enrollments

The one-in-four African American to white ratio that we found in receipt of bachelor's degrees stays relatively constant for graduate school enrollments (Figure 5). In 1995, there was approximately one African American graduate student to every six whites. In the

Figure 4

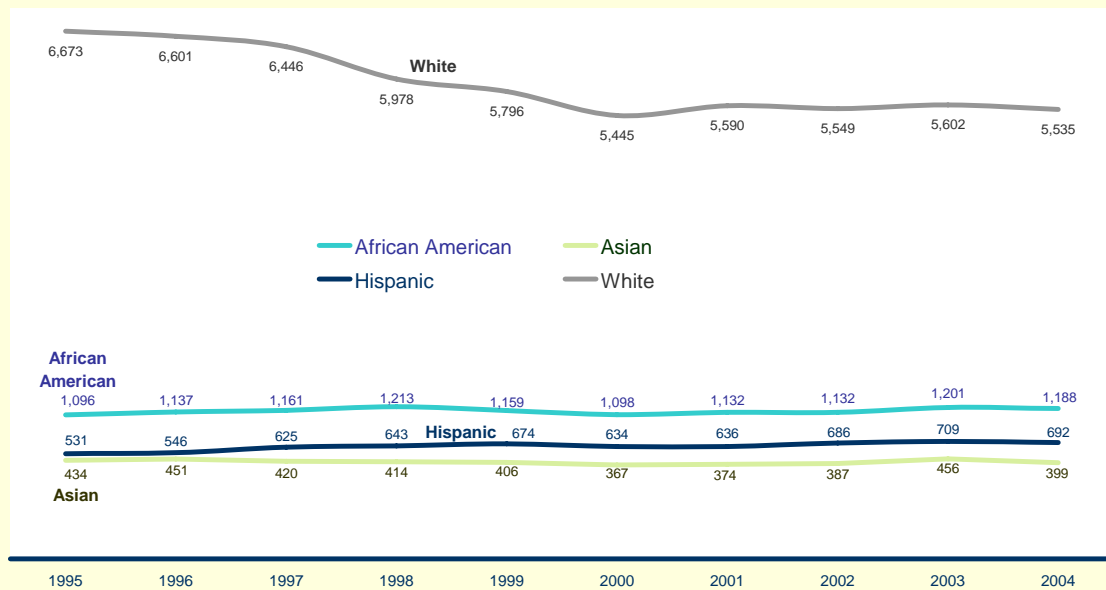
Plans for Attending Graduate School or Getting a New Job of Graduating Sociology Majors by Race or Ethnicity: 2005  
(Percent of Graduates; Weighted Data)



Source: American Sociological Association, Research and Development Department, *What Can I Do With a Bachelors in Sociology? A National Survey of Seniors Majoring in Sociology* (Washington, DC:ASA, 2005).

Figure 5

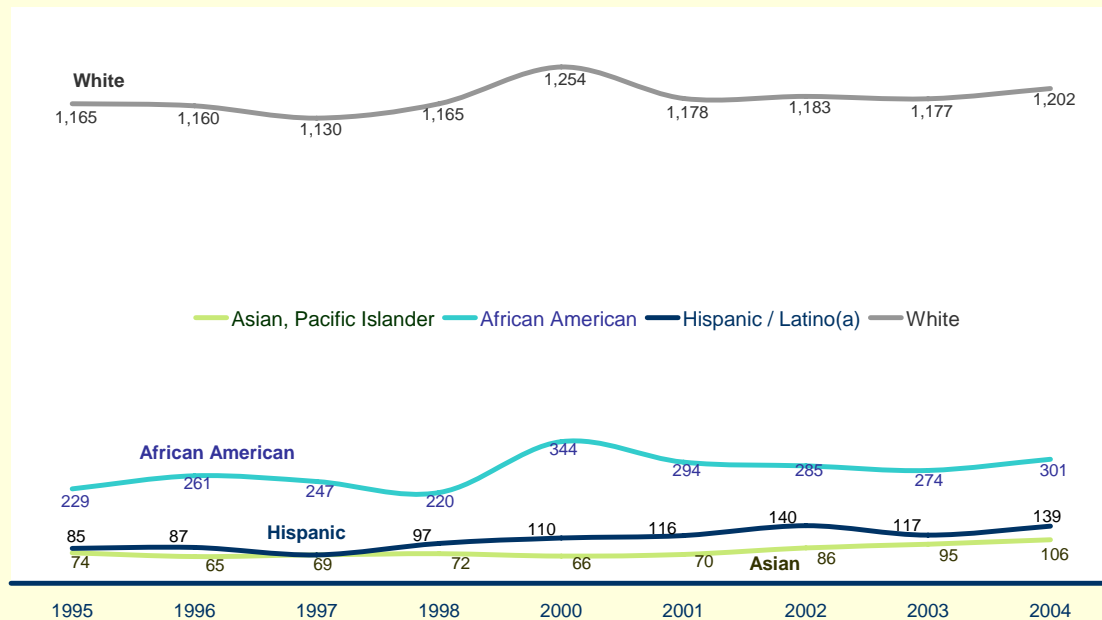
Graduate Enrollments in Sociology by Selected Race and Ethnicity Groups: 1995-2004  
(Number of Graduate Students)



Source: National Science Foundation (NSF), Division of Science Resources Statistics (SRS), *Survey of Graduate Students and Postdoctorates in Science and Engineering, 1982-2004* (Arlington, VA: NSF, 2006). Retrieved from <http://caspar.nsf.gov> (October 26, 2006).

Figure 6

Master's Degrees Awarded in Sociology by Selected Race/Ethnic Categories: 1995-2004  
(Number of Master's Degrees Awarded)



Source: U.S. Department of Education, National Center for Education Statistics (NCES), *Integrated Postsecondary Education Data System (IPEDS) Completions, 1995-2004* (Washington, DC: NCES, 2006). Retrieved from <http://caspar.nsf.gov> (October 26, 2006).

most recent year for which the National Science Foundation (NSF) has data (2004), the ratio was 1 African American for each 4.6 whites. This ratio suggests that, currently, there is little disproportionate leakage in the first post-bachelor's stage in the pipeline and that the supply of African American students (or the demand for them) remained constant since obtaining their bachelor's degrees.

### Master's Degrees in the Pipeline

This one-in-four ratio remained constant at the master's level. In 1995, the ratio of African Americans to whites obtaining their master's degrees was one to five, but the relative number of African Americans increased while the relative number of whites stayed stable in the 10 years since 1995. By 2004, the ratio of African Americans to whites who obtained the master's degrees narrowed to one in four (Figure 6). This finding suggests no disproportional leak from the pipeline during this first stage of graduate school.

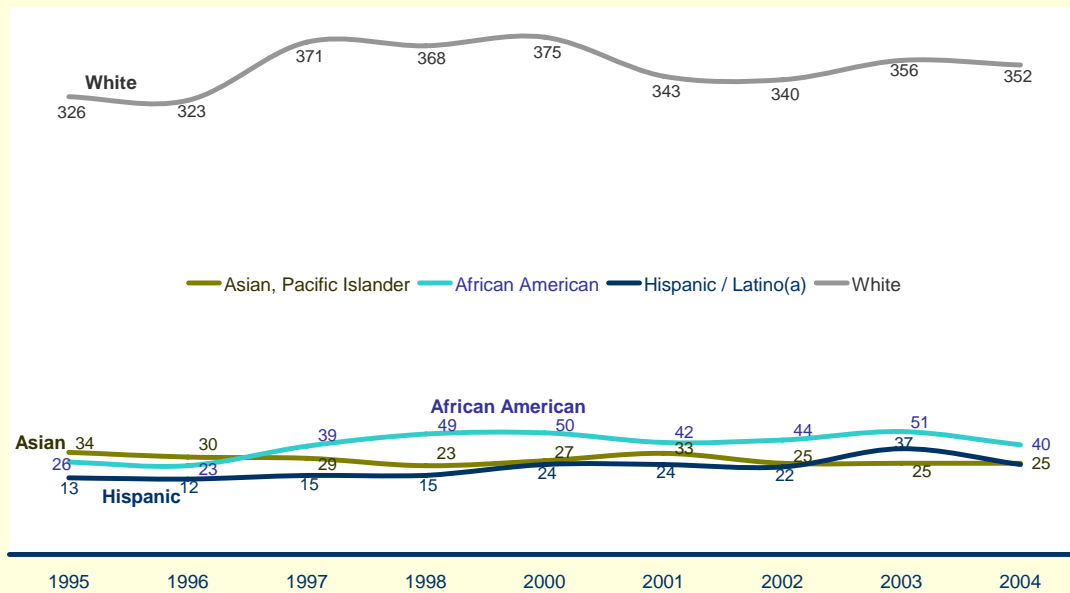
### Ph.D.'s in the Pipeline

By the time sociology students have obtained their doctorates, there has been serious leakage in the pipeline (Figure 7) with an 85 percent loss of African American master's graduates compared to 51 percent loss of whites. The gap between African American and whites obtaining doctoral degrees, however, has been closing over the last decade. In 1995, the gap was one African American for every twelve whites. By 2004, the gap had decreased to one African American for every nine whites. Nonetheless there were five fewer African Americans awarded doctorate degrees for every Ph.D. awarded to white students than there were at the master's degree level.

ASA's Minority Fellowship Program, active since 1975, attempts to retain minority doctoral students in the Ph.D. pipeline. It is designed to mentor selected minority Ph.D. students, help them to successfully clear this juncture in the pipeline, and put them on the

Figure 7

Doctorate Degrees Awarded in Sociology by Selected Race/Ethnic Categories: 1995-2004  
(Number of PhDs Awarded)



Source: U.S. Department of Education, National Center for Education Statistics (NCES), *Integrated Postsecondary Education Data System (IPEDS) Completions, 1995-2004* (Washington, DC: NCES, 2006). Retrieved from <http://caspar.nsf.gov> (October 26, 2006).

track to successful scholarly productivity once they complete their doctoral degrees.

Although we saw that African Americans were more likely to report receiving mentoring while undergraduates than whites, this does not appear to be the case for African Americans and Hispanics during graduate school. When asked in an ASA survey of newly minted Ph.D.'s whether or not they received faculty help in publishing, the key measure of academic productivity, there were statistically significant differences among race and ethnic groups. Only 33 percent of African Americans and 36 percent of Hispanics answered in the affirmative compared to 56 percent of whites and 48 percent of Asians. This finding is important for understanding later career leakage since graduate school and early career productivity has long-term implications for academic careers.

In spite of the leakage between the master's and the doctorate degree, there was a slightly

higher share of race and ethnic groups (including African Americans) obtaining doctorates in sociology than in other behavioral and social sciences as of 2004. Figure 8 shows that over 20 percent of sociology doctorates were awarded to minority group members, which is about two percent more than for political science, economics, and psychology. Economics as a discipline tends to have more Asians and fewer African Americans and Hispanics than the other social science disciplines.

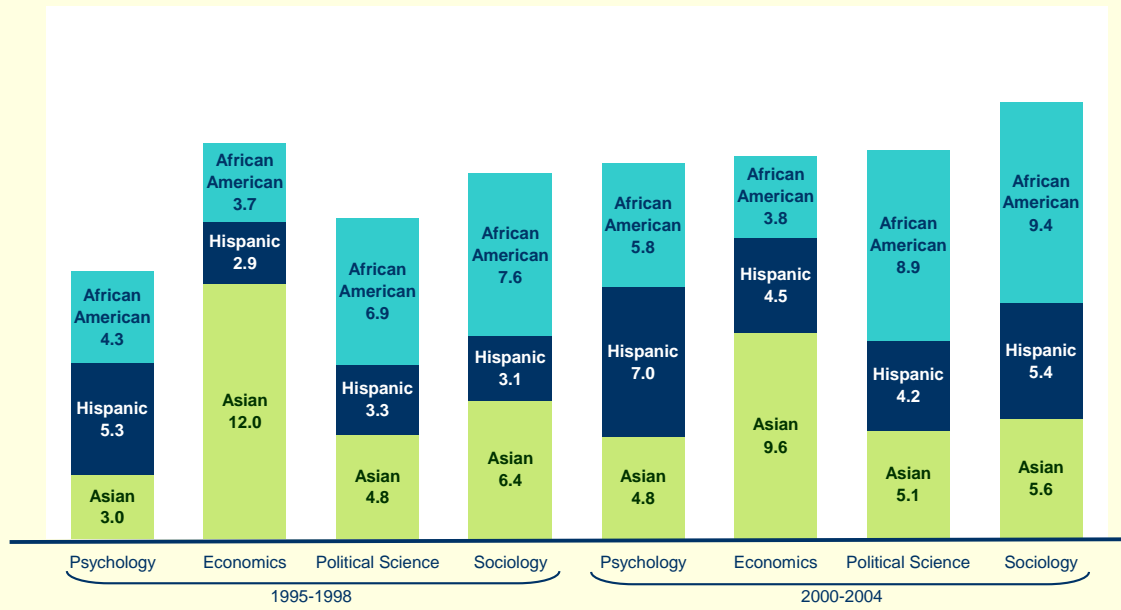
### Obtaining the First Post-Doctorate Position

What happens to minority Ph.D.'s as they attempt to move into faculty positions? To measure this process, Figure 9 presents the ratio of the number of job applications to the number of job offers received by race and ethnic groups (using data from ASA's Ph.D. tracking survey, currently in its tenth year).

Asians do best in terms of mean number of

Figure 8

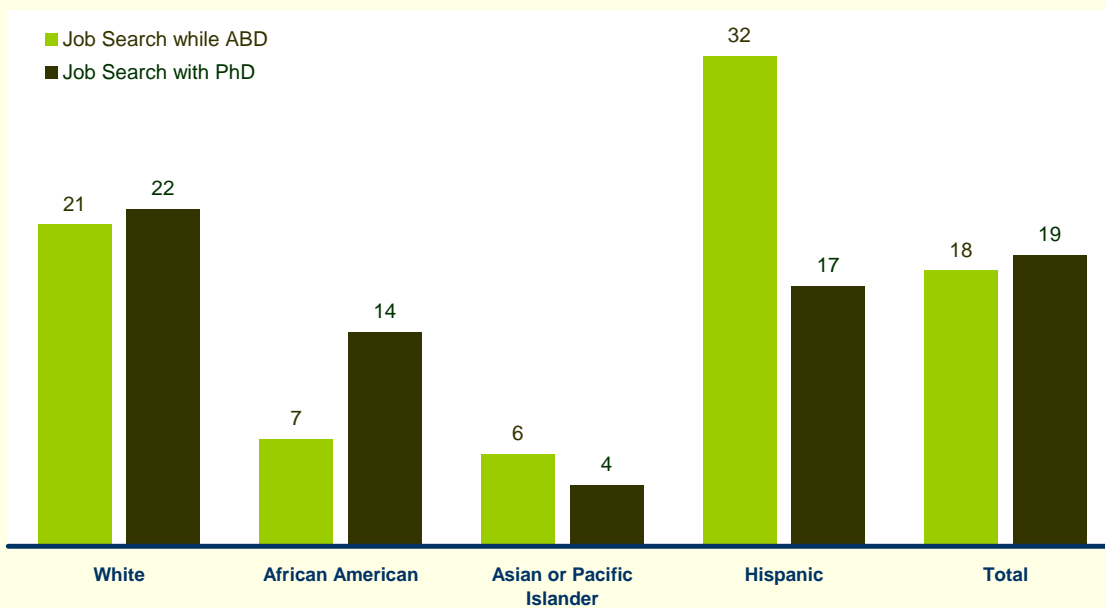
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Figure 9

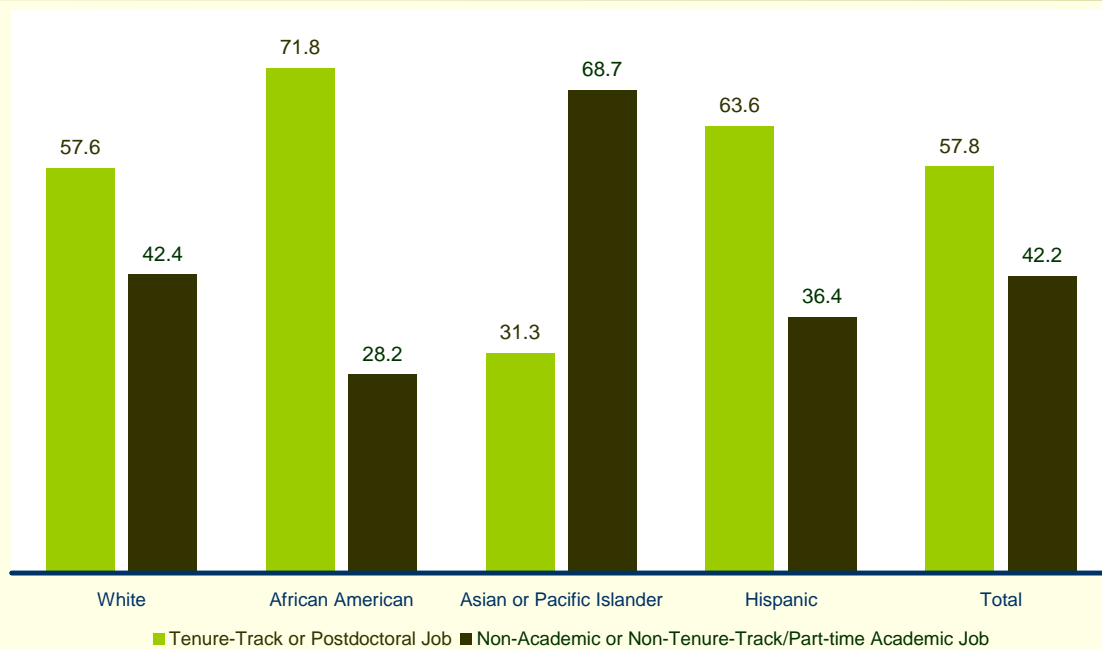
**Applications per Job Offer by Race and Ethnicity: 1998**  
(Mean Number of Applications per Job Offer)



Source: ASA, Research and Development Department, *Minorities at Three Stages in the Sociology Pipeline* (Washington, DC: ASA, 2001, p.5).

Figure 10

Distribution of PhD Graduates by Type of Job Obtained by Race/Ethnicity: 1998  
(Percent of Race/Ethnicity Category)



Source: ASA, Research and Development Department, *Minorities at Three Stages in the Sociology Pipeline* (Washington, DC: ASA, 2001, p.6).

offers per application, yet relatively few applied for jobs and Figure 10 shows that fully half of these new doctoral recipients obtained non-tenure track or part-time positions rather than tenure track positions. African Americans appear to be “hot” on the market while they are ABDs (receiving an average of one job offer for every seven applications), but less so after they obtain their doctorates. They were the most likely of all the groups to obtain tenure track positions (72 percent did so). The small number of Hispanics was the second most likely to obtain tenure track positions but needed to send off more applications to receive job offers. Given the relatively small numbers of African American doctoral recipients in any given year (approximately 40), these data show a relatively strong demand for these new Ph.D.’s and less of a demand for Asians and Hispanics.

### Distribution of First Post-Doctorate Positions by Type of Institution

As shown in Figure 11, white assistant and full professors were evenly distributed by type of institution of higher education, with more than 80 percent of whites in each type of institution. Members of minority groups, however, were unequally distributed. African Americans were somewhat under-represented at Research and Doctoral universities and over-represented and Bachelor’s-only institutions compared to their percent in the entire population of sociology faculty members. In contrast, Hispanics and Asians were under-represented at Bachelor’s-only institutions. The small number of these later two minority groups may not provide an accurate picture of demand, however.

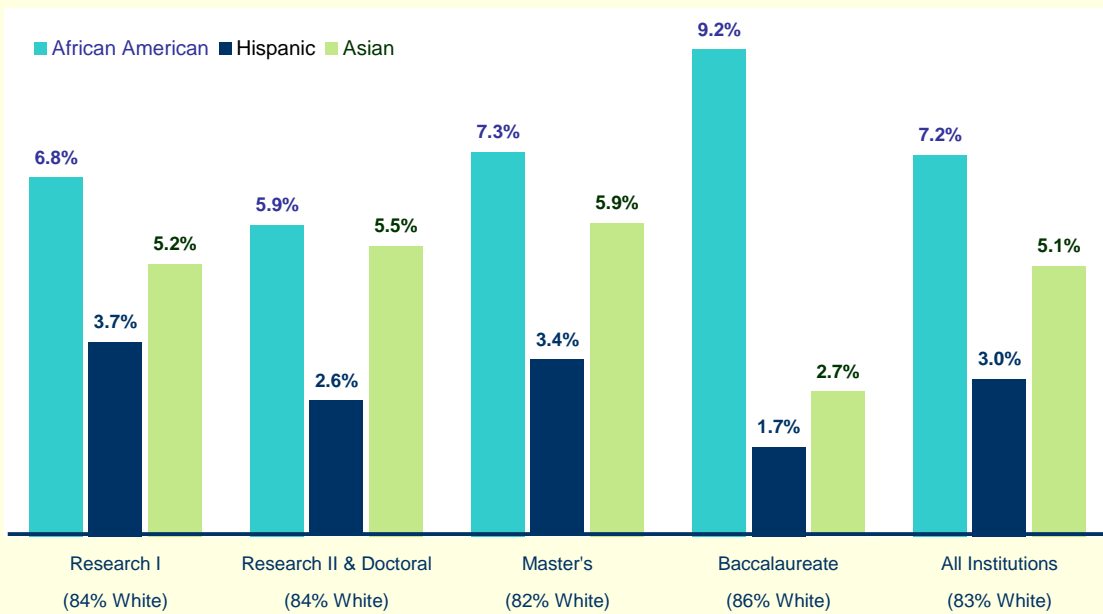
### The Loss of Underrepresented Minority Faculty by Rank and Type of Institution

Figure 12 shows the declining percentage of underrepresented minorities (that is, African



Figure 11

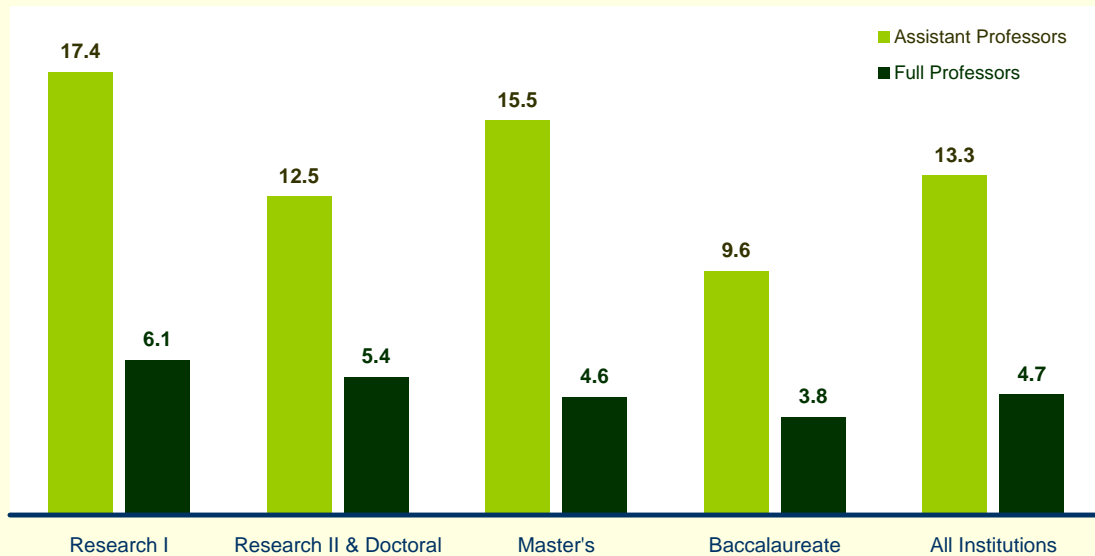
**African American, Hispanic or Latino/a, and Asian Faculty by Institution Type: 2000/2001**  
(Percent of Total Faculty)



Source: American Sociological Association, Research and Development Department, *Survey of Baccalaureate and Graduate Programs in Sociology, 2000/2001* (Washington, DC: ASA, 2002).

Figure 12

**Assistant and Full Professors in Sociology Programs**  
**Who are in a Underrepresented Minority\* Category by Institution Type: 2000/2001**  
(Percentage of Faculty Rank)



\* African American, Hispanic or Latino/a, and Native American.

Source: American Sociological Association, Research and Development Department, *Survey of Baccalaureate and Graduate Programs in Sociology, 2000/2001* (Washington, DC: ASA, 2002).

Figure 13

Median Annual Salaries of African American and White Assistant Professors and Full Professors in Sociology Programs (in 2006 Constant Dollars): 2000/2001



Source: American Sociological Association, Research and Development Department, *Survey of Baccalaureate and Graduate Programs in Sociology, 2000/2001* (Washington, DC: ASA, 2002).

Americans) in faculty ranks at different types of institutions.<sup>1</sup> Overall, there was an 8.6 percent difference in the percentage of underrepresented minority faculty between the assistant and the full professor level at all universities. Research I universities started with the highest percentage of minority faculty at the assistant professor level, but these schools lost the second highest percentage of these faculty members between assistant and full professor ranks. The greatest leak in the pipeline was at Master’s Comprehensive universities where there was an 11 percent leak between the lowest and the highest ranks. This finding suggests that either minority faculty were being recruited from Master’s Comprehensive institutions or that they are not being promoted.

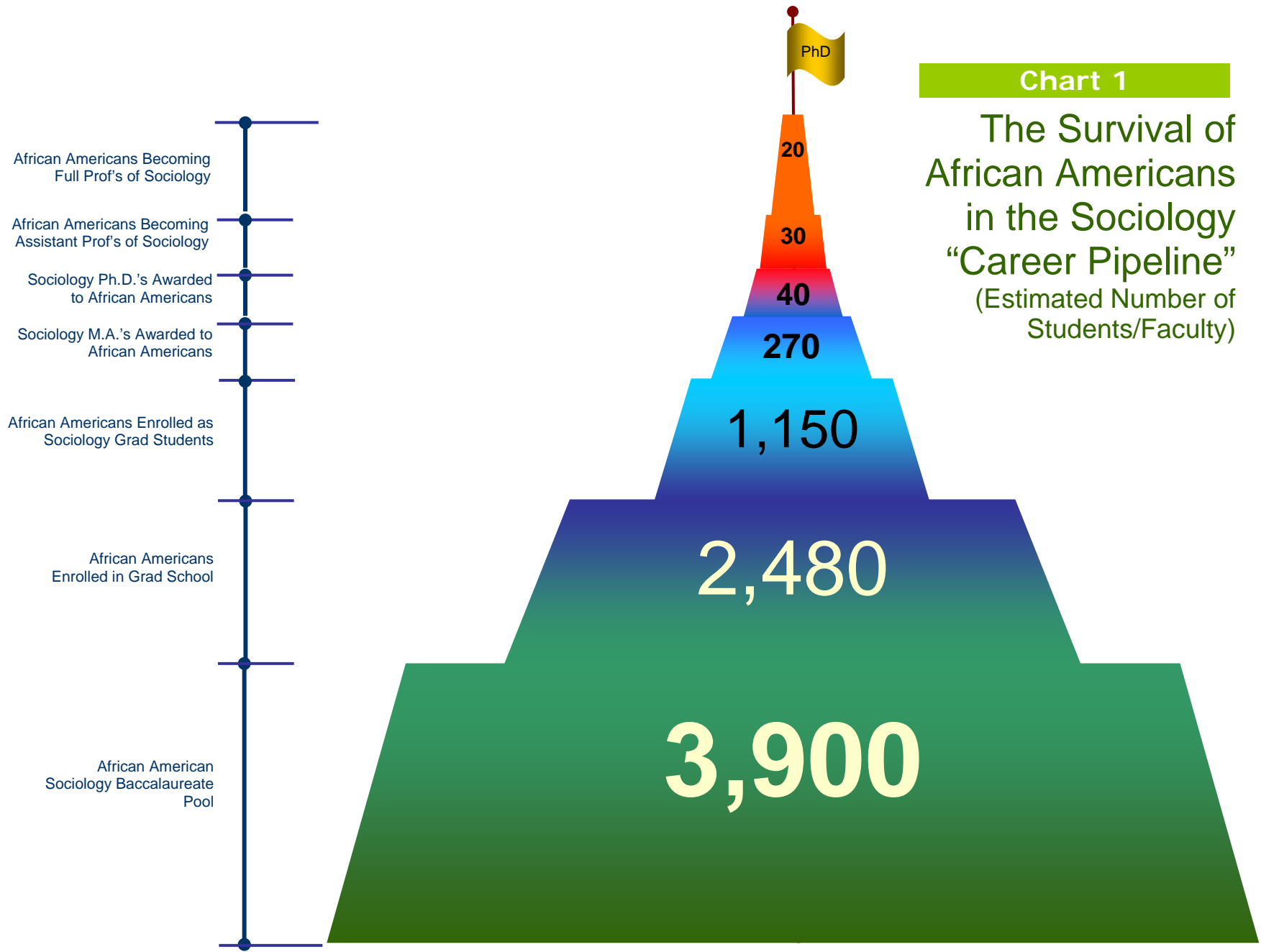
<sup>1</sup> Because of their high degree of academic success as a group in the science, engineering, and mathematics disciplines, Asian American are not generally considered to be a underrepresented minority in higher education programs or positions.

### Salary Levels

African American faculty members who stay in institutions of higher education to become full professors have higher salaries than do whites in similar ranks (see Figure 13). For every dollar earned by white faculty at the rank of full professors, African Americans earn \$1.30. This may be the result of greater time in rank, or the scarcity in the market for African Americans who have not been weeded out of the pipeline at earlier stages.

### CONCLUSION

The wedding cake-like Chart 1 shows the estimated amount of leakage in the pipeline at each stage in the academic career of African Americans in sociology. As we have seen, not all of this leakage is disproportional. African American undergraduate majors are enamored of the sociological perspective with it’s



**Chart 1**

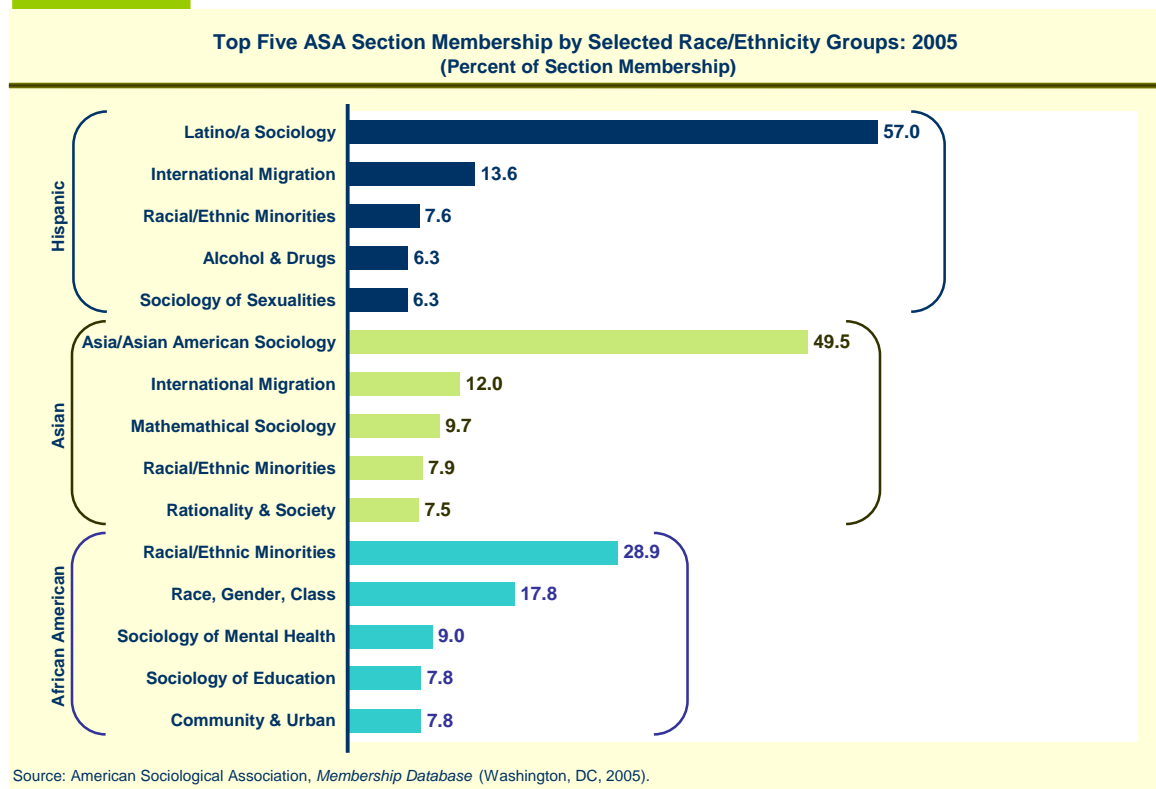
The Survival of African Americans in the Sociology “Career Pipeline”  
 (Estimated Number of Students/Faculty)

understandings of the relation of individuals and social forces and its emphasis on analysis of and strategies for social change. More African Americans hope to go on, and do attend, graduate school than other race and ethnic group. Disproportionate leakages do not begin until the doctorate level. Those African Americans who do obtain their doctoral degrees in sociology are the most likely group to obtain tenure track positions, although their positions are not evenly distributed by type of institution. Although the data suggest a strong demand for African American with doctoral degrees, they also show another major leakage in the faculty ranks. In contrast to African Americans, the relative proportion of whites increased rather than decreased between assistant to full professor.

One reason for concern about these leaks is the topics and areas of interest

minorities bring to sociology as a discipline. A frequently made argument for diversity is that various racial and ethnic groups bring new topics and interests to the academy. Figure 14 shows that each group had strong interest in the sociological perspective and knowledge based on their own race or ethnic group. Hispanics were most likely to join the Latina/o Sociology section, Asians were most likely to join the Asia/Asian American section, and African Americans were most likely to join the Racial and Ethnic Minorities section or the Race, Class, and Gender section. The clustering of race and ethnic groups into certain sections does show a relationship between areas of interest and demographic characteristics and suggests that there might be an under representation in key sociological topic areas if there were no minorities in the pipeline.

Figure 14



Studies of the academic pipeline have lead to programs (such as ASA's Minority Fellowship Program supported by National Institute of Mental Health). With the growth of anti-affirmative action sentiment, these programs may be on the decline. Future studies will help us to understand whether the lack of programs will result in more disproportionate leaks in the pipeline.

For example, ASA's Ph.D. tracking survey should tell us whether or not underrepresented minorities leave the academy as a result of failure to obtain tenure and other push factors, or whether there are pulls to jobs outside the professorate. Future studies will also help us to formulate policy strategies to plug the leaks.

Note: An earlier version of this report was presented on November 4, 2006 at the 28<sup>th</sup> Annual Research Conference of the Association for Public Policy Analysis and Management, held in Madison, Wisconsin