

Behavioral and Social Sciences Research in the FY 2002 Budget

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INTRODUCTION

The National Institutes of Health (NIH), the National Science Foundation (NSF), the Department of Defense (DOD) and the Department of Education (ED) are the primary funders of behavioral and social science. Lesser, but subdisciplinarily important, support comes from the National Institute of Justice (NIJ), the Federal Aviation Administration (FAA), the National Aeronautics and Space Administration (NASA) and the U.S. Department of Agriculture (USDA). The federal government is the primary overall funder of both basic and applied behavioral and social science research. Highlights of the FY 2002 budget include:

- Longtime Director for Social and Economic Sciences, Bill Butz, is stepping down at NSF. A new director will carry these sciences into FY 2002. Sharply curtailed growth in the NSF budget means a shrinking in the size of plans for FY 2002. Nevertheless, a new program in Cognitive Neuroscience will get underway, perhaps using funds reprogrammed from the Social, Behavioral and Economic Sciences Directorate's (SBE) two-year-old program to upgrade the infrastructure of the behavioral and social sciences. Plans for a large initiative in 2003 are still in the works.
- Army, Navy, and Air Force behavioral and social science funding is expected to be essentially level funded in FY 2002, although the Pentagon has yet to release details of its FY 2002 request.

- Research at the Department of Education's Office of Educational Research and Improvement (OERI) is to be level funded under the President's budget request, but the National Center for Education Statistics would receive an increase to add new participants to ongoing national studies in order to compensate for participant attrition over the years.
- NIH is the exception to level funding for behavioral and social science. Like funding for other disciplines, NIH support of behavioral and social science research should grow by about 15 percent.

NATIONAL INSTITUTES OF HEALTH (NIH)

The amount of behavioral and social sciences research (BSSR) funded extramurally appears to be growing steadily at NIH, fueled by NIH's record growth, and increasing acceptance of these sciences as tools to address the agency's public health mission. This research, which was painstakingly defined as required by the NIH Revitalization Act of 1993, is funded by nearly all of the institutes and centers at NIH. Information on the amount of BSSR funded by each institute and center is collected by the NIH Budget Office as part of what is informally called "the disease list" (a multi-page list of diseases, conditions, etc. for which NIH is required to report its research expenditures to Congress).

As a percentage of the NIH budget, however, research in the behavioral and social sciences is not keeping pace with overall NIH growth. NIH estimates of BSSR spending for the past three fiscal years have shown BSSR funding hovering around the 10 percent mark. The total estimate for FY 2002 is \$2.3 billion, or 10.3 percent of the Administration's requested \$23.1 billion total NIH budget.

Efforts to improve the quality of NIH's data on behavioral and social science research have not been entirely successful. For example, the National Center for Complementary and Alternative Medicine, which funds research on such behavioral interventions as relaxation techniques or stress and pain management, reports its expenditures under a different category, not as BSSR. At least one institute did not include its behavioral

BEHAVIORAL AND SOCIAL SCIENCES RESEARCH IN THE FY 2002 BUDGET

research on animals as part of the BSSR total. So the \$2.3 billion estimate may well be low.

The Office of Behavioral and Social Sciences Research (OBSSR) in the Office of the NIH Director received a modest budget increase in FY 2001, and is now funded at \$20.6 million (up from \$19.9 million in FY 2000). The Administration's request for OBSSR is \$23.7 million, a 15 percent increase. This would allow the Office to begin to implement the recommendations in the National Research Council's (NRC) new report, *New Horizons in Health: An Integrative Approach*. The report identifies research priorities that cut across Institute domains, underscoring the broad significance of social and behavioral science research for multiple disease outcomes as well as health promotion. The NRC report recommends ten priority areas for research investment: pre-disease pathways; positive health; environmentally induced gene expression; personal ties; healthy communities; inequality; population health; interventions; methodology; and infrastructure and training.

The budget of OBSSR includes \$10 million to fund five centers that support research on mind-body interactions and health. The centers focus on research that seeks to understand how beliefs, attitudes, values and stress affect physical and mental health, and how beliefs, attitudes, and values that affect health are developed, maintained, and changed.

Table 1. NIH funding of Behavioral and Social Sciences Research (partial list) (in millions of dollars)

Institute	FY 99 Actual	FY00 Est.	FY 01 Est.	FY 02 Request
NIMH	\$286.0	\$316.6	\$359.8	\$402.7
NIDA	259.8	300.2	345.0	400.2
NCI	172.7	205.0	226.0	248.6
NICHD	154.5	193.5	219.8	246.2
NIA	86.7	163.3	186.6	208.8
NIAAA	141.1	150.3	158.4	170.8

Source: NIH Office of the Director, Office of Budget (April 2001)

The new director of OBSSR, Raynard Kington, M.D., Ph.D., is a physician and social scientist who came to NIH from the Centers for

Disease Control and Prevention, where he directed a national survey on nutrition and health. Dr. Kington has a research interest in health disparities, and sits, *ex-officio*, on the NIH advisory committee for the new National Center for Minority Health and Health Disparities. (For more information on NIH, please see Chapter 8.)

NATIONAL SCIENCE FOUNDATION (NSF)

Bill Butz, as Director for Research and, later, as Director for Social and Economic Sciences, has left his imprint on support of behavioral and social science. With his announced departure, one can only speculate about changes to occur. Butz has been known as a leader who respects the abilities of his staff. But he has also been an innovator, initiating the effort to bring the infrastructure of the behavioral and social sciences into the 21st Century, recruiting rotating program officers with national reputations, and experimenting with program funding allocation levels as incentives for his program officers to be aggressive in helping their fields develop.

The Administration's modest budget request for NSF is requiring a rethinking of plans developed when both the White House and Congress were backing a doubling of the NSF budget. A number of key legislators have said that they will not stand for an NSF budget that fails even to compensate for inflation. Few believe, however, that their commitment is going to translate into the 15 percent increase that would be necessary to keep NSF on the doubling trajectory.

The SBE leadership is hoping not to have to make major changes in its development plans. Instead, they are looking at more modest rollouts of new efforts than had originally been planned. The Directorate will continue with plans to hire a program officer for a new effort in Cognitive Neuroscience. One of the controversies when the Biological, Behavioral and Social Sciences Directorate was split into a Biology and a Social, Behavioral and Economic Sciences Directorate a decade ago had to do with the splitting of neuroscience from cognitive science. Neuroscience remained in Biology while cognitive science went to SBE. The new program is an attempt to bring the mind and the brain back together.

BEHAVIORAL AND SOCIAL SCIENCES RESEARCH IN THE FY 2002 BUDGET

Without substantial new money, however, funds to start this new program must come from other programs. Final decisions have not been made, but a prime target for resources is the Infrastructure for the Behavioral and Social Sciences program. This two-year effort funded about a dozen large projects to provide new infrastructure. For example, it funded a project at Princeton to build a database of brain images. These images, collected with magnetic resonance imaging devices and positron emission tomography, are extremely expensive to produce. The database is now a resource for a variety of scientists who use brain scans in their work. While two rounds of competition are probably inadequate to modernize the behavioral and social science research infrastructure, the programs funded so far have made a dent in the need. Thus drawing money from this program to fund other efforts may be the least damaging thing the Directorate can do in light of its tight budget.

When Norman Bradburn was being coaxed by Rita Collwell to head the SBE Directorate, Bradburn agreed to come on board if SBE's budget could be doubled. This was not a hard promise to make when the whole Foundation was on a doubling track. With NSF in apparently reduced circumstances, it is reasonable to worry about whether the promise can be fulfilled. SBE's FY 2001 budget is \$164.4 million. But its FY 2002 request is \$163.2 million, a 0.8 percent decline (see Table II-7). A large down payment on the promised increase was to have been a major NSF-wide initiative in 2003 that would be anchored in the SBE Directorate. Work has been underway on the initiative for over a year. But recent talk in the Directorate suggests that a hike in funding of core research programs in FY 2003 might replace the initiative as expectations are revised downward.

DEPARTMENT OF EDUCATION (ED)

Today, with increased interest in the federal role in education and growing awareness of education as the foundation of economic growth, educational research is broadly recognized as a necessary function of the federal government. The Office of Educational Research and Improvement (OERI), in the United States Department of Education, serves as the major federal educational research agency, providing research and data collection.

To support core educational research programs within OERI, funding level with FY 2001 has been requested. The five Institutes, eleven National Research Centers, and the Office of Reform Assistance and Dissemination (ORAD) would again receive a total of \$120.6 million. Out of this, the Centers would receive \$36.0 million, the Regional Educational Labs funding would be \$65 million, and field-initiated studies would receive \$17.2 million to explore new research ideas from the field and develop future research capacity. It is anticipated that 35-40 new field-initiated studies would be funded in FY 2001, but fewer for FY 2002 due to continuation costs for the FY 2001 awards. New project funding would be \$4.8 million for FY 2002 and continuation funding \$12.4 million.

The Interagency Education Research Initiative (IERI), which combines the efforts of the Department of Education (ED), the National Science Foundation, and the National Institute of Child Health and Human Development (NICHD), would also be level-funded at \$20 million. This program supports study of best practices for schools and classrooms and examination of different instructional approaches. An additional \$2.5 million would fund another round of awards for the interagency initiative for research between ED and the NICHD on the development of English-language literacy competencies among children whose first language is not English. This would be in addition to the \$10 million the project received in FY 2001.

The National Center on Education Statistics (NCES) would receive an additional \$5 million over the \$85 million it received last year for expansion of the sample size for the National Assessments of Adult Literacy from the original 13,000 adults. This funding was requested to help ensure accurate estimates for key demographic and analysis subgroups, and provide support for the decennial census mapping project, which provides 2000 Census data for school districts. The National Assessment of Educational Progress (NAEP) would gain \$69 million for the development of the proposed annual State-level reading and mathematics assessments at grades 4 and 8 that are included in the Administration Elementary and Secondary Education Act reauthorization legislation, currently in Congress. None of these funds would be available for implementation of the tests. (For more information on NCES, please see Chapter 22. For more on the Department of Education, please see Chapter 5.)

DEPARTMENT OF DEFENSE (DOD)

DOD funding for behavioral and social science is modest when compared to the cost of developing even a single weapon system. It is also relatively modest compared to funding provided by NIH and NSF. But DOD's support is crucially important for a number of subdisciplines in the behavioral and social sciences. DOD support, for example, built the field of judgment and decision making research. While NSF now also provides funding for this work through its Decision Risk and Management Sciences program, the major source of support for the field remains DOD. The same may be said of non-medical research in cognitive neuroscience. Navy and Air Force funding for this work has had significant positive impact on the growth of the field. Some areas of sociology such as those dealing with the nature of leadership and its influences on group formation and group dynamics are also kept afloat through DOD funding. Moreover, some of the most innovative and important advances in education and training research have occurred because of the practical need in the military to quickly train raw recruits to work skillfully in highly demanding and highly technological environments.

Thus, rises and falls in the DOD budget for behavioral and social science have disproportionate impacts on a number of fields. For over a decade, military support for behavioral and social science has been slowly dwindling. The rate of decline threatened to increase beginning in the current fiscal year because of an Air Force decision to concentrate its resources on developing capabilities in space while playing down the aeronautical side of its development portfolio. The threatened decline has not yet materialized for the behavioral and social sciences, however.

Under Secretary of Defense Donald Rumsfeld, the Pentagon is undergoing a broad rethinking of its mission and how the mission should be accomplished. The early indications are that behavioral and social science research will remain stable in FY 2002. Because of the review process that is underway, DOD has delayed release of the details of its budget. Nevertheless, the expectation of those who administer the research programs is that their overall funding will not be cut and may be revised slightly upward. (For more on the DOD request and the Defense Strategy Review, please see Chapter 6.)

Here are the best guesses about how these budgets will look. The Army Research Institute should receive about \$23.5 million, up slightly from \$23.3 million this year. The rough division of those funds should be about \$2.8 million for basic (called “6.1”) research, \$13.3 million for applied research (“6.2”), \$3.1 million for advanced development (“6.3”) and \$4.3 million for testing and evaluation (“6.5”). Most behavioral and social science research is complete by the time it reaches the “6.3” level. The Army uses its “6.5” money mainly to pay for the reports that detail the products of the research that has been supported. The Office of Naval Research should receive about \$61.1 million for behavioral and social science research, up from \$48.7 million this year. Of that amount, \$17.5 million is expected to go to basic research, \$22.6 million to applied research, and \$21 million to advanced development. The estimate for the Air Force Office of Scientific Research is for level funding. That is, basic research should receive about \$14.1 million, applied research \$49.7 million, and advanced development \$37.6 million for an expected total of \$101.3 million, the same level as the current plan for spending in FY 2001.

The most sweeping changes as a result of the review now underway are likely to be seen in the Fiscal Year 2003 budget request. Until now, military planning has been based on maintaining the capability to fight two major wars at once. Secretary Rumsfeld is abandoning that measure, which is likely to prompt a new round of troop reductions. If that is the case, the impact on behavioral and social science research could go either way, interestingly enough. The pressure to do more things with fewer people has the potential to increase the level of research. But a plan to do with hardware what had been done with people could mean a downturn for people-related research. Stay tuned for further developments.