

Examples of DBASSE Studies That...

APPLY BEHAVIORAL AND SOCIAL SCIENCE TO DEFENSE AND NATIONAL SECURITY ISSUES

The primary function of intelligence analysts is to make sense of information about the world, but the way analysts do that work will look profoundly different a decade from now. Technological changes will bring both new advances in conducting analyses and new risks related to technologically based activities and communications around the world. The Intelligence Community (IC) will need to make sustained collaboration with researchers in the social and behavioral sciences a key priority if the IC is to adapt to them in the most productive ways, says ***A Decadal Survey of the Social and Behavioral Sciences: A Research Agenda for Advancing Intelligence Analysis***. This report provides guidance for the development of a 10-year research agenda and identifies key opportunities for research to strengthen intelligence analysis.

PROVIDE ADVICE ON STATISTICAL METHODS, SURVEYS, AND DATA SOURCES

U.S. federal government statistics—for example, on the unemployment rate or the rate of violent crime—provide critical information used by policy makers, businesses, and the public to guide key decisions. Many federal statistics are based on sample surveys, but these surveys are often unable to fulfill growing demands for more timely and detailed information. A pair of reports—***Innovations in Federal Statistics: Combining Data Sources While Protecting Privacy*** and ***Federal Statistics, Multiple Data Sources and Privacy Protection: Next Steps***—propose a new paradigm for federal statistics by combining administrative and private sector data with surveys to enhance the timeliness, detail, and relevance of federal statistical programs. These reports have served as the foundation for initiatives by the Office of Management and Budget for the federal statistical system and were also used and cited by the Commission on Evidence-Based Policymaking in its report to Congress.



Examples of DBASSE Studies That...

SHAPE EDUCATION PRACTICE AND POLICY

Science, engineering, and technology permeate nearly every aspect of modern life. Some knowledge of science and engineering is required to understand many major public policy issues, to thrive in many of today's jobs, and to make informed everyday decisions—all of which makes effective science education for the nation's students imperative. ***A Framework for K-12 Science Education: Practices, Cross-cutting Concepts, and Core Ideas*** identifies the key scientific practices, concepts, and ideas that all students should learn by the time they complete high school. A consortium of states used the report as the basis for the development of the *Next Generation Science Standards*, which are now shaping the science education of K–12 students in more than two dozen states.

IMPROVE AND EXTEND ECONOMIC MEASUREMENT AND DATA

During the past decade, interest in measuring subjective well-being—how people feel about their experiences and how satisfied they are with their lives—has grown among policy makers, researchers, the media, and the general public. This interest has sprung from concerns that traditional economic measures, such as the gross domestic product (GDP), do not by themselves adequately reflect a population's well-being and quality of life. ***Subjective Well-Being: Measuring Happiness, Suffering and Other Dimensions of Experience*** examines methods of measuring people's subjective well-being and explores how such measures could inform policy.

PROVIDE ADVICE ON RESEARCH DESIGN AND PRIORITIES FOR RESEARCH

Citizens and consumers face an increasing need to integrate information from science with their personal values as they make important decisions about medical care, the safety of foods, and many other issues. But the most effective approaches for communicating information about science to the public, especially concerning contentious issues, are not well-understood. ***Communicating Science Effectively: A Research Agenda*** offers an agenda for research that can inform and improve efforts to communicate about science effectively. This report is being used by the National Academies, private foundations, and nonprofit organizations to encourage science communication practitioners to partner with researchers to learn more about how science is understood, perceived, and used. Subsequently, the Standing Committee on Advancing Science Communication Research and Practice was established at the National Academies to foster multidisciplinary connections in order to strengthen the field of science communication.



Examples of DBASSE Studies That...

ADVISE REGULATORY AGENCIES

Recent advances in mining practices have improved the safety and health of underground coal miners, but preventing mine disasters and preparing miners to survive in the event of emergencies remains a priority. ***Improving Self-Escape from Underground Coal Mines*** provides guidance to the Office of Mine Safety and Health Research (within the National Institute for Occupational Safety and Health [NIOSH]) about ways to improve self-escape preparations for mining personnel. NIOSH has taken steps to implement the report's recommendations in a number of areas, including the assessment of responses, improvement of relevant technology and safety culture, use of decision science, and training.

APPLY BEHAVIORAL AND SOCIAL SCIENCE TO SOCIETAL ISSUES

Changing patterns of immigration and their evolving effects on American society continue to fuel public policy debates playing out at the national, state, and local levels. ***The Integration of Immigrants into American Society*** analyzes evidence about the integration and well-being of U.S. immigrants in a range of areas, such as education, occupation, health, and language. A subsequent report, ***The Economic and Fiscal Consequences of Immigration***, assesses the effects of immigration on employment and wages for different subgroups of the population, federal and state government budgets, and long-run economic growth. Cited by hundreds of news outlets ranging from *The New York Times* to *PBS* to *The Atlantic*, these reports mark an influential contribution to the nation's conversation about immigration policy. Both reports will serve as fundamental resources for researchers, policy makers, the media, and the general public for years to come.

EVALUATE GOVERNMENT PROGRAMS

Several years after the District of Columbia enacted legislation giving control of public schools to the mayor, the city needed to understand the reform's impacts and whether the city's public schools were heading in the right direction. ***An Evaluation of the Public Schools of the District of Columbia*** examines whether the law brought intended improvements to oversight of the schools and to learning conditions and outcomes for students, identifying areas that are working well and those that need additional attention. The city has initiated an audit of education data and has established a research-practice partnership, two key report recommendations.



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APPLY BEHAVIORAL AND SOCIAL SCIENCE TO ENVIRONMENTAL ISSUES

Climate change is expected to place new stresses on societies around the world—for example, from heat waves and droughts that may exceed a nation's capacity to respond—and these stresses could create security risks for the United States. At the request of the U.S. Intelligence Community, a study committee examined the evidence and proposed a strategy for developing indicators that could be used to assess climate-related threats to U.S. national security, detailing their recommendations in ***Climate and Social Stress: Implications for Security Analysis***. Multiple agencies in the United States and other nations have shown interest in using the approach recommended in this report to inform future decisions.

INFORM LEGAL PRACTICE AND POLICY

After decades of stability, the United States saw its incarceration rate more than quadruple in the past 40 years. How has this increase affected society at large, communities, families, and individuals? ***The Growth of Incarceration in the United States: Exploring Causes and Consequences*** examines research and analysis on this question, finding evidence of a number of unwanted consequences. This report recommends changes in sentencing policy, prison policy, and social policy that could reduce the nation's reliance on incarceration. Often referred to as a landmark study, this report has been used to call for reexamination of incarceration policies in editorials and op-eds in places such as *The New York Times* and *The Wall Street Journal*.

IMPROVE PUBLIC SAFETY

The Safety Measurement System (SMS) is an algorithm developed and used by the Federal Motor Carrier Safety Administration (FMCSA) to identify high-risk truck and bus companies—those whose vehicles have more frequent violations discovered during roadside inspections, which suggests a higher likelihood of being involved in future crashes. ***Improving Motor Carrier Safety Measurement*** reviews the SMS and assesses the quality of the data used. This report also considers whether other approaches to selecting high-risk motor carriers for interventions might have advantages over the SMS. Based on the report's recommendations, FMCSA has begun to develop a new model that could replace the SMS. At the agencies' request, a standing committee has been created at the National Academies to advise them in this task.



Examples of DBASSE Studies That...

PROVIDE INTERNATIONAL PERSPECTIVES ON POLICY

Although the United States spends more on health care than any other nation, a growing body of research shows that Americans are in poorer health and live shorter lives than people in many other high-income countries. ***U.S. Health in International Perspective: Shorter Lives, Poorer Health*** takes a comprehensive look at multiple diseases, injuries, and behaviors across the life span, comparing the United States with 16 peer nations—affluent democracies such as Australia, Canada, Japan, and many Western European countries—and offering insights on factors that may be responsible for the nation's health disadvantage. This report has been widely cited in public debates about health practice and policy in the United States.

APPLY BEHAVIORAL AND SOCIAL SCIENCE TO HEALTH AND HUMAN DEVELOPMENT ISSUES

Although bullying has long been tolerated by many as a rite of passage among children and adolescents, recognition has grown that it is a serious public health problem rather than a normal part of childhood. ***Preventing Bullying Through Science, Policy, and Practice*** examines evidence on the consequences of bullying as well as the context, scope, and impact of the problem. This report—along with an accompanying suite of information resources on how to recognize and prevent bullying—has been widely used by policy makers, parents, educators, health care providers, and others concerned with the care of children.

INFORM GOVERNMENT SPENDING DECISIONS

Life expectancy in the United States has risen significantly over the past century, but not equally; people who are better educated and earn higher incomes live longer, on average, than those with less education and lower incomes. This difference has an impact on how much people at various income levels draw in government benefits, such as Social

Security and Medicare, over their lifetimes. ***The Growing Gap in Life***

Expectancy by Income: Implications for Federal Programs and

Policy Responses provides the first comprehensive estimates

of how lifetime government benefits are affected by

differences in income and life expectancy. This report

also examines how commonly proposed entitlement

reforms, such as raising the eligibility age for Social

Security, would affect the benefits gap. This in-depth

analysis has assisted government decision makers,

economists, and researchers.

