

Giving away and selling the behavioral sciences

Serving on the National Advisory Committee for the Decade of Behavior has been an interesting and broadening experience. I have gained a new appreciation for the breadth of the behavioral sciences and the range of individual and societal problems to which they are applicable. The committee's 16 members represent a truly diverse range of behavioral disciplines, and the committee's discussions have been eye-opening.

Achieving the central goal of the initiative—giving away the behavioral sciences—requires the participation of all the behavioral sciences. The problems and opportunities that confront us, as individuals and a society, are complex and multifaceted. Overcoming those problems and seizing those opportunities require drawing on the best of research and theory from all the behavioral sciences.

Giving away the behavioral sciences also, however, requires selling the behavioral sciences—and their potential to improve health, increase public safety, enhance education and promote prosperity and democracy, which is another goal of the initiative. Achieving that goal also requires that the behavioral sciences speak with a unified voice—to the public, to Congress and to funding agencies.

Human technologies

The physical sciences—and the engineering technologies derived from those sciences—have had a profound impact on our individual and collective lives. I do not doubt that such technologies will continue to transform our lives, but I think we are in an era when human technologies, derived from the behavioral sciences, are relatively more important and physical technologies relatively less important.

The answers to many of the complex problems that now confront us—as individuals, families, neighborhoods, cities and a society—do not lie in the physical sciences. Overcoming the



By Robert Bjork, PhD
University of California, Los Angeles

problems that beset our schools, for example, does not lie in making computers and associated devices better, faster, and more available, however desirable that may be. Similarly, overcoming the violence in our society does not lie in more and better metal detectors or surveillance cameras.

To the extent that answers to the myriad complex problems facing our society do exist, they will often need to come from the behavioral sciences. Six of the 10 leading causes of death are behaviorally based. More than 80 percent of accidents on our roads, in our skies and elsewhere are the consequence of behavioral errors. Roughly half of the nation's medical costs are attributable to behavioral noncompliance with medical instructions. Barriers to prosperity, equality and democracy tend to be behavioral and attitudinal. Behavioral conditions in our schools are not conducive to learning, teachers lack the resources or training they need and teaching methods do not reflect what we know about how children learn.

Not that finding such answers will be easy. From a scientific standpoint, the issues involved are often incredibly com-

plex. As E.O. Wilson argues, the social sciences are “hypercomplex,” and that they “are inherently far more difficult than physics and chemistry, and as a result, they, not physics and chemistry, should be called the hard sciences.”

Psychological science in the public interest

Collectively, in my view, the behavioral sciences—their complexity notwithstanding—are a more important national resource than ever before. Serving on the National Advisory Committee has reinforced that view, as has co-editing (with Stephen Ceci) *Psychological Science in the Public Interest (PSPI)*, a new publishing venture by the American Psychological Society.

The mission of *PSPI* is to identify topics of broad public interest and to commission teams of distinguished scientists to write reports summarizing what the best of psychological research has to say on those topics. An especially important aspect of *PSPI* is that *Scientific American* is a partner in the venture: *PSPI* reports will be rewritten by *Scientific American*'s writers for that magazine's broad audience (the first such rewritten report, “Better Decisions through Science,” by John Swets, Robyn Dawes and John Monahan, is in the October 2000 issue).

The behavioral sciences are uniquely relevant to the individual and societal problems and opportunities that characterize this era. Psychology, by itself, has produced a body of findings relevant to a range of important concerns, such as child rearing, schooling, job selection and training, counseling, treatment of affective disorders, policing, human-factors design and organizational and interpersonal aspects of the workplace. Although that progress pales in the face of the challenges that remain for the science of psychology, the accumulated body of empirical findings and psychological theory is a far better foundation for public policies and personal decisions than are intuition or standard practice. Ψ