

Psychology's Growth Careers

Psychologists' expertise in human behavior is increasingly welcomed in many nontraditional career settings.

Good news: Despite the country's current economic downturn, experts say it's never been a better time to be a psychologist, thanks largely to the psychology field's breadth and adaptability. With the help of these experts, the Monitor has compiled a list of areas in which psychologists are in demand, either in terms of the number of positions available now, the growth potential of the area or both. Some areas apply basic psychological training in novel ways or settings--for example, programs that combat unhealthy behaviors. Other areas are tied to the nation's well-being, such as bolstering the mental health of returning veterans, Americans' ability to cope with terrorist threats or the psychological health of older adults. Other trends are simply new spins on psychology practice. Although some psychologists fear that independent practice is increasingly a vestige of the past, innovators show it can remain a rewarding way to help people. Overall, the expanding career market indicates that psychologists' expertise in human behavior is being recognized and embraced by more fields, in more ways, says Claremont Graduate University psychology professor Dale E. Berger, PhD, who closely tracks psychology careers. "Most of the problems in the world are problems of behavior--how people treat others, how they treat the environment and how they treat themselves," Berger says. "We have an understanding of behavior and the methods to study it that allows us to address all kinds of important issues in a variety of settings."

Program Evaluation

One particularly hot growth area for psychologists also has the potential to make a major difference in public health: program evaluation. Using psychological research tools, evaluators assess the strengths and weaknesses of programs, policies and organizations to improve their effectiveness, says Stewart I. Donaldson, PhD, who with Berger and Kathy Pezdek, PhD, co-edited "Applied Psychology: New Frontiers and Rewarding Careers" (Lawrence Erlbaum, 2006). Program evaluation is similar to a traditional psychological study, but it's in the real world, Donaldson says. "The tools of program evaluation enable psychologists to help prevent and solve some of the world's most pressing social, community and organizational problems," he says. The number of professional evaluation societies worldwide has climbed from five in 1990 to about 50 today, Donaldson notes. Expertise in program evaluation is critical for such groups as the Bill and Melinda Gates Foundation, which spends millions of dollars to make sure its programs tackling ills such as poverty, poor health care and unemployment are taking effect. Many program evaluators also work in the private sector to ensure the effectiveness of companies' initiatives on diversity, productivity and quality of life. The federal government also relies on program evaluators. Donaldson, for example, helped to evaluate the 1980s' "Just Say No" anti-drug programs, and determined that they actually sent the wrong message--essentially that drug use is the norm, which, ironically, led to greater drug use. From that work sprang today's more successful programs that ensure teens don't misperceive the prevalence or "coolness" of drug use, Donaldson says.

Working with older adults

In 2004, Americans 65 and older made up 12 percent of the population. By 2050, they'll make up 21 percent. These numbers--along with the fact that older adults are increasingly receptive to mental health services--mean that geropsychology is poised to be a major growth area, says APA Committee on Aging (CONA) Chair Peter Lichtenberg, PhD, director of Wayne State University's Institute of Gerontology. "Geropsychologists bring skills--such as superior assessment, intervention and consultation abilities--that are sorely needed by our nation's older adult population," he says. These psychologists work in a variety of capacities, including as service providers, researchers, directors of older adult mental health programs, and as designers of "smart homes" and products that help older adults more easily manage their lives. The work is varied and stimulating, adds Deborah DiGilio, director of APA's Office on Aging. "Geropsychologists do everything from keeping older adults mentally and physically healthy and vibrant, to working with those who are frail and have cognitive impairments," she says. The field itself is maturing. In 2003, APA adopted the Guidelines for Psychological Practice with Older Adults (see www.apa.org/practice/adult.pdf). In 2006, field leaders convened a national training conference where they developed the "Pike's Peaks" training model, and last year they formed a new organization of training programs that will support training at the competency level and beyond. In addition, CONA is working on projects to infuse geropsychology content into curricula from the high school to the graduate school level. Recognizing psychologists' growing role in the area, in February, APA's Council of Representatives adopted Blueprint for Change: Achieving Integrated Health Care for an Aging Population (www.apa.org/pi/aging/blueprint.html), a report developed by the APA Task Force on Integrated Healthcare for an Aging Population. The report highlights the importance of providing integrated, interdisciplinary care to older adults.

Aiding Soldiers, Veterans and their Families

Given the federal push to improve mental health services for those serving in Iraq and Afghanistan, opportunities abound for psychologists in the **Department of Defense and the Department of Veterans Affairs (VA)**. The VA alone has funded more than 800 new psychology positions since fiscal year '05, a 36 percent increase, says Brad Karlin, PhD, of the VA's Office of Mental Health Services. As of December, the VA was still recruiting for 100 of those positions. Besides providing one-on-one and group therapy to veterans, VA psychologists play a key role in such innovative new programs as national initiatives to integrate psychologists into general primary care, VA nursing homes and home-based primary care, where psychologists are key members of teams that take services to veterans unable to travel to the hospital.

There are a small number of psychologists in research and administrative positions as well. (To find out more, visit www.vacareers.va.gov/, or call the VA's national job information line at 800-949-0002.)

Likewise, the DoD has a growing need for psychologists, says Col. Bruce Crow, PhD, clinical psychology consultant to the U.S. Army surgeon general. In the Air Force, Navy and Army, for example, only 82 percent of the 474 career psychologist positions are filled, for reasons ranging from the fact that some slots have only been open for a short time to the fact that a number of psychologists left active duty in 2004 and 2005 at the end of their service obligations. A number of civilian positions are available as well. Besides offering excellent salary and benefits and loan repayment for licensed psychologists entering active duty, the DoD pays for employees' continuing education and board certification. It also offers APA-approved internships with competitive salaries. Moreover, the DoD offers the chance to work in positions with a high degree of responsibility and leadership potential, Crow says. For more information, visit www.usajobs.com.

Homeland Security

The Department of Homeland Security (DHS) "recognizes that behavioral, social and cognitive research is really important to their mission, so they're ramping up investment in those areas," says APA Executive Director for Science Steven Breckler, PhD. Two DHS-funded centers in particular rely on psychologists to examine the impact of terrorist threats and events from a social and behavioral science perspective. The first, the **National Consortium for the Study of Terrorism and Responses to Terror, or START** (www.start.umd.edu), housed at the University of Maryland, uses social and behavioral science to examine the origins, dynamics, and social and psychological impact of terrorism. "Terrorism is a quintessentially psychological problem, on both the individual and societal levels," says social psychologist Arie Kruglanski, PhD, who heads the center's working group on terrorist group formation and recruitment. His team examines what motivates people to join terrorist organizations and how those groups elicit such motivations. Others are studying the psychology and sociology of terrorist group operations, as well as community responses to terrorist attacks and how to promote resilience. The second DHS-funded center, the **National Center for Risk and Economic Analysis of Terrorism Events, or CREATE** (www.usc.edu/dept/create/), located at the University of Southern California, focuses on risk and economic analysis of terrorism. Social and behavioral scientists there study how people and groups make decisions following threat warnings or terrorism events, in order to better estimate the economic and social consequences of such events. "So much has been written about the irrationality of terrorists, but they're not irrational at all in their goals and beliefs," says Richard John, PhD, who is helping to create a decision-making model that predicts how terrorist organizations might think about where and how to strike. "It makes more sense to view them as foreign countries or Fortune 500 companies with strategic objectives." Such information could then be used by DHS to formulate strategies to mitigate risk, including allocating resources in a way that takes into account the risk potential of different locations, he says.

Government Service

The federal government is hungry for psychologists, in part because it has created new positions, but also because many senior psychologists are retiring, says Jessica Kohout, PhD, director of APA's Center for Psychology Workforce Analysis and Research. Psychologists who work in the government hold a number of key posts, for example as program or division directors in such science-centered agencies as the National Institutes of Health (NIH) and the National Science Foundation (NSF). At NIH, many institutes such as the National Institute of Mental Health, the National Institute of Child Health and Human Development, the National Cancer Institute and the National Institute on Drug Abuse, have active and vibrant behavioral science programs, Breckler notes, while NSF maintains programs in social psychology, human cognition, developmental psychology, cognitive neuroscience, law and social science, and decision science. In addition, various NIH institutes have their own research labs, which employ many lab chiefs, scientists, research assistants and postdocs. NIH lists positions at www.jobs.nih.gov. To tap into jobs at any federal agency, visit usajobs.gov. The National Science Foundation posts job openings on its Web site, www.nsf.gov/about/career_opps/.

Other psychologists in government work as legislative aides to members of Congress, including former APA President Pat DeLeon, PhD, who has worked for Sen. Daniel Inouye (D-Hawaii) for 34 years. His psychological background helped him achieve such coups as establishing a national pediatric-emergency service program and creating postdoc psychology positions at the VA. "Public servants are limited only by their own vision, energy and interpersonal skills," says DeLeon. And, of course, a few psychologists have become politicians themselves, including Rep. Brian Baird, PhD, (D-Wash.) and Ohio Gov. Ted Strickland (D). A great way to test these political waters is to apply to APA's Congressional Fellowship Program, which funds several psychologists each year to work as special legislative advisers to members of Congress. Depending on their expertise, fellows work on issues as diverse as violence and abuse prevention, health disparities, services for people living with HIV/AIDS and mental health care reform. (Visit APA Fellows for more information.)

Psychologists are also in demand at the **Federal Bureau of Prisons**, where they work in clinical services, administration, research and training. The need has never been greater, with one in 100 Americans now behind bars--the highest number in history--according to a new report from the Pew Center on the States. Philip Magaletta, PhD, clinical training coordinator in the psychology services branch there, estimates that the bureau has about 20 positions open annually; internships are also available. "There is no greater high-risk, high-need group than inmates, and psychology has barely begun to scratch the surface of the potential it holds for addressing their needs," he says. For more information, contact Magaletta at: pmagaletta@bop.gov.

Workplace Applications

Industrial-organizational (I/O) psychology has long been a popular and lucrative area, and it's growing: Membership in the Society for Industrial and Organizational Psychology or SIOP (APA's Div. 14), for example, has risen 11 percent since 2000, and student membership has gone up 63 percent in the same time period, says SIOP President Lois Tetrick, PhD. The field takes core areas of the psychological literature--testing, measurement, statistics, social psychology, cognitive psychology, as well as research on attitudes, teams and personality--and applies them to the wide and changing variety of workplace settings, cultures and employees, says Tetrick. In recent years, technology, communications and globalization have all influenced the way I/O psychologists think about organizations and work design, Tetrick notes. For example, they're applying the human-factors literature on human-machine interactions and virtual teams in work with companies in these areas. In the international arena, I/O psychologists have paid increasing attention to cross-cultural issues related to communications, attitudes, and organizational culture and climate.

Two areas are particularly popular for psychologists at the moment, says **Tetrick: executive coaching and occupational health psychology**. Executive coaching, which combines clinical and I/O skills to improve executive performance, is SIOP members' second most frequently cited primary area of interest after selection and hiring (see <http://gradpsych.apags.org/nov06/coaching.html> for more). Meanwhile, occupational health psychology is a burgeoning subfield that focuses on preventing ill health and fostering good health through job design, good leadership and stress reduction. (Tetrick edits the field's APA journal, *Journal of Occupational Health Psychology*.)

Courtroom Expertise

For those with the right training, **forensic psychology** is a booming area, says psychologist Alan M. Goldstein, PhD, a professor at the John Jay College of Criminal Justice and editor of "Forensic Psychology: Emerging Topics and Expanding Roles" (John Wiley & Sons, 2007). Forensic psychologists conduct psycho-legal evaluations and offer their opinions as expert witnesses in criminal, malpractice and other cases, says Goldstein. The area became an APA-approved specialization in 2001. Since then, "more and more practice areas are emerging," Goldstein says, including assessing and managing workplace and school violence; assessing and evaluating cases of clergy abuse, elder abuse and those involving end-of-life issues; and conducting independent medical evaluations. Meanwhile, forensic neuropsychologists--who have training both in neuropsychology and forensic psychology--are in greater demand as well, as courts increasingly seek expertise in medical and accident cases.

Practice Niches

According to data compiled by APA's Center for Psychology Workforce Analysis and Research, the percentage of psychologists in independent practice climbed from 24.6 percent in 1987 to 38.7 percent in 2006. That said, experts believe new thinking and strategies are needed to keep the area flourishing. One way to do this is by developing specialty niches focusing on areas that others with less training can't do as effectively. APA Div. 42 (Independent Practice) President-elect Tammy Martin-Causey, PhD, advises psychologists to do a needs-assessment in their communities first, then choose niches from there. So, for example, if you live in an area with a large population of smokers, you may want to develop a practice focused on **smoking cessation**, she says. Practices that accommodate clients' busy schedules are also in demand, Martin-Causey says. With the clients in her Phoenix-area practice, for example, she keeps late office hours, holds lengthy couples therapy sessions so people don't have to commute long distances as often, and adds leadership development workshops to her mix of services.

Multidisciplinary Applications

Perhaps more than any other scientific discipline, psychology is a "hub" science, one that connects to virtually all of the social, behavioral, mathematical and biological sciences, says APA's Breckler. That means psychologists are particularly well-positioned to take advantage of the trend toward multidisciplinary research and applications. Funding is following suit: NIH, for instance, has poured millions of dollars into multidisciplinary health and social science projects in such areas as obesity, elder self-neglect, stroke neurorehabilitation and health disparities (see the May 2005 *Monitor* for more).

One \$22 million, NIH-funded effort is the Consortium for Neuropsychiatric Phenomics, based at the University of California, Los Angeles. There, 52 investigators from several institutions are testing a new paradigm for understanding mental illnesses based on basic brain processes, rather than the currently used descriptive diagnostic categories. In particular, the team--including experts in genetics, genomics, molecular biology, psychology, cognitive neuroscience, neuroimaging, clinical psychiatry, animal behavior and other areas--is examining memory mechanisms and response inhibition, two aspects of brain function that span multiple mental disorders. Eventually, findings could be used to tailor treatment in more refined ways. Meanwhile, David Woods, PhD, professor at Ohio State University's Institute for Ergonomics, says his human factors students are securing fascinating jobs post-graduation, thanks to their multidisciplinary course load. Besides traditional human factors classes, they take courses in digital production, new media and innovation to learn how to create computerized products and systems with the input of artists and designers. When they leave the program, they take jobs in areas such as designing devices and systems that center medical care on promoting long-term patient health and creating robots and sensors that extend humans' ability to work in remote or dangerous settings, such as on space missions and search-and-rescue operations.

