CAREERS IN

PSYCHOLOGY

PSYCHOLOGISTS

Conduct Research

Apply Science

Provide Health Care

Teach and Study Learning

Promote Community and Individual Well-Being

Advise Business, Industry, and Policymakers

MAKE A DIFFERENCE IN THE WORLD!

AMERICAN
PSYCHOLOGICAL
ASSOCIATION

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WHAT IS PSYCHOLOGY?

Why people do the things they do is an age-old question. However, psychology—the science concerned with behavior, in both human and nonhuman animals—first appeared in the 1870s. Despite its youth, it is a broad discipline, essentially spanning subject matter from biology to sociology. Psychologists have doctoral degrees. They study the intersection of two critical relationships: one between brain function and behavior, and another between the environment and behavior. As scientists, psychologists follow scientific methods, using careful observation, experimentation, and analysis. But psychologists also need to be creative in the way they apply scientific findings.

Psychologists frequently are innovators, evolving new approaches from established knowledge to meet the changing needs of people, organizations, and societies. They develop theories and test them through their research. As this research yields new information, these findings become part of the body of knowledge that practitioners call on in their work with clients and patients, as well as with organizations and communities. Psychology is a tremendously varied field. Psychologists conduct both basic and applied research, serve as consultants to communities and organizations, diagnose and treat people, and teach future psychologists and those who will pursue other disciplines. They test intelligence and personality. Many psychologists work as health care providers. They assess behavioral and mental function and well-being, study how human beings relate to each other and also to machines, and work to improve these relationships. And because the United States is undergoing sizable change in its population makeup, psychologists provide important knowledge and skills to help better understand diverse cultures.

Many psychologists work independently and also team up with other professionals—for example, with other scientists, physicians, lawyers, school personnel, computer experts, engineers, policymakers, and managers—to contribute to every area of society. Thus, we find them in laboratories, hospitals, courtrooms, schools and universities, community health centers, prisons, and corporate offices.

Psychologists traditionally study both normal and abnormal functioning and treat individuals with mental and emotional problems. They also concentrate on behaviors that affect the mental and emotional health and mental functioning of healthy human beings. For example, psychologists work with patients to help

them change behaviors that are having negative effects on their physical health. They work with business executives, performers, and athletes to reduce stress and improve performance. They advise lawyers on jury selection and collaborate with educators on school reform. Immediately following a disaster, such as a plane crash or bombing, psychologists help victims and bystanders recover from the trauma, or shock, of the event. They team with law enforcement and public health officials to analyze the causes of such events and prevent their recurrence. Involved in all aspects of our fast-paced world, psychologists must keep up with what's happening all around us. When you're a psychologist, your education never ends.

As has long been true, opportunities in psychology for those with graduate degrees will be more plentiful and at a higher level than for those with undergraduate degrees. An undergraduate degree remains excellent preparation for continued graduate work in psychology or in another field, such as business, medicine, or computer science. Many employers are interested in the skills that psychology majors bring to collecting, analyzing, and interpreting data and their experience with statistics and experimental design.

Most psychologists say they love their work. They cite the variety of daily tasks and the flexibility of their schedules. They are thrilled by the exciting changes taking place in the field—from adapting technology to benefit humans, to working as part of primary health care teams.

Opportunities for people with advanced degrees in psychology are expanding in number as well as in scope. The move toward preventing illness rather than merely diagnosing and treating it requires people to learn how to make healthy behavior a routine part of living. Indeed, many of the problems facing society today are problems of behavior—for example, chronic health conditions or disease, drug addiction, poor personal relationships, violence at home and in the street, and the harm we do to our environment. Psychologists contribute solutions to problems through careful collection of data, analysis of data, and development of intervention strategies—in other words, by applying scientific principles, the hallmark of psychology.

In addition, an aging America is leading to more research and practice in adapting our homes and workplaces for older people. The promises of the electronic revolution demand more user-friendly technologies and training. More two-career families in the workplace spur employers to accommodate the needs of families. Psychologists are helping to make the changes that are needed. The diversity in America today calls for psychologists to develop and refine treatments and approaches to meet the unique needs of different racial and ethnic groups. Furthermore, research advances in learning and memory, and the integration of physical and mental health care, make psychology more exciting than ever.

Most psychologists say they love their work. They cite the variety of daily tasks and the flexibility of their schedules. They are thrilled by the exciting changes taking place in the field—from adapting technology to benefit humans, to working as part of primary health care teams. They are endeavoring to provide answers to research questions in such diverse areas as prevention, perception, and learning, and they are using new technology and knowledge to train the next generation. It is an exciting time to be a psychologist.

SOME OF THE SUBFIELDS IN PSYCHOLOGY

Psychologists specialize in a host of different areas within the field and identify themselves by many different labels. A sampling of those focal areas is presented here to give you an idea of the breadth of psychology's scholarship and applications.

The field of psychology encompasses both *research*, through which we learn fundamental things about human and nonhuman animal behavior, and *practice*, through which that knowledge is applied to solving problems and promoting healthy human development. In each of the subfields, there are psychologists who work primarily as researchers, others who work primarily as practitioners, and many who do both (scientist–practitioners). Indeed, one of psychology's most unique and important characteristics is its coupling of science and practice, which stimulates the continual advancement of both. Additionally, many psychologists teach psychology in academic institutions, from high schools to graduate programs in universities.

Clinical psychologists assess and treat mental, emotional, and behavioral disorders. These range from short-term crises, such as difficulties resulting from adolescent conflicts, to more severe, chronic conditions, such as schizophrenia. Some clinical psychologists treat specific problems exclusively, such as phobias or clinical depression. Others focus on specific populations—for instance, youths; familes or couples; ethnic minority groups; gay, lesbian, bisexual, and transgender individuals; or older people. They also consult with physicians on physical problems that have underlying psychological causes.

Cognitive and perceptual psychologists study human perception, thinking, and memory. Cognitive psychologists are interested in questions such as how the mind represents reality, how people learn, and how people understand and produce language. Cognitive psychologists also study reasoning, judgment, and decision making. Cognitive and perceptual psychologists frequently collaborate with behavioral neuroscientists to understand the biological bases of perception or cognition or with researchers in other areas of psychology to better understand the cognitive biases in the thinking of people with depression, for example.

Community psychologists work to strengthen the abilities of communities, settings, organizations, and broader social systems to meet people's needs. They help people access resources and collaborate with others to improve their lives and communities. Instead of helping individuals cope with negative circumstances (e.g., trauma, poverty), community psychologists help empower people to change those circumstances, prevent problems, and develop stronger communities. Examples of community psychology interventions include improving support for hurricane victims, partnering with neighborhoods to prevent crime, collaborating with schools to prevent bullying, and helping change policies to improve health outcomes. Community psychologists blend research and practice, partnering with diverse citizens to plan and implement community changes, advance social justice, and use research to inform and evaluate this work.

Counseling psychologists help people recognize their strengths and resources to cope with everyday problems and serious adversity. They do counseling/psychotherapy, teaching, and scientific research with individuals of all ages, families, and organizations (e.g., schools, hospitals, businesses). Counseling psychologists help people understand and take action on career and work problems, they pay attention to how problems and people differ across the life span, and they have great respect for the influence of differences among people (such as race, gender, sexual orientation, religion, disability status) on psychological well-being. They believe that behavior is affected by many things, including qualities of the individual (e.g., psychological, physical, or spiritual factors) and factors in the person's environment (e.g., family, society, and cultural groups).

Developmental psychologists study the psychological development of the human being that takes place throughout life. Until recently, the primary focus was on childhood and adolescence, the most formative years. But as life expectancy in this country approaches 80 years, developmental psychologists are becoming increasingly interested in aging, especially in researching and developing ways to help older people stay as independent as possible.

Educational psychologists concentrate on how effective teaching and learning take place. They consider a variety of factors, such as human abilities, student motivation, and the effect on the classroom of the diverse races, ethnicities, and cultures that make up America.

Engineering psychologists conduct research on how people work best with machines. For example, how can a computer be designed to prevent fatigue and eye strain in people? What arrangement of an assembly line makes production most efficient? What is a reasonable workload? Most engineering psychologists work in industry, but some are employed by the government, particularly the Department of Defense. They are often known as human factors specialists.

Environmental psychologists study the dynamics of person–environment interactions. They define the term *environment* very broadly, including all that is natural on the planet as well as built environments, social settings, cultural groups, and informational environments. They examine behavior evolving at various scales and from various processes (e.g., localization, globalization). They have a broad and inherently multidisciplinary focus. They recognize the need to be problem oriented, coordinating as needed with researchers and practitioners in the other fields of psychology, in related disciplines (e.g., sociology, anthropology, biology, ecology), as well as in the design fields (e.g., regional, urban, and community planning; landscape architecture; architecture; and engineering).

Environmental psychologists explore such issues as common property resource management, the effect of environmental stress on human effectiveness and well-being, the characteristics of restorative environments, and human information processing. They also foster conservation behavior, helping people to craft durable behavioral responses to emerging biophysical limits.

Evolutionary psychologists study how evolutionary principles such as mutation, adaptation, and selective fitness influence human thought, feeling, and behavior. Because of their focus on genetically shaped behaviors that influence an organism's chances of survival, evolutionary psychologists study mating, aggression, helping behavior, and communication. Evolutionary psychologists are particularly interested in paradoxes and problems of evolution. For example, some behaviors that were highly adaptive in our evolutionary past may no longer be adaptive in the modern world.

Experimental psychologists are interested in a wide range of psychological phenomena, including cognitive processes, comparative psychology (cross-species comparisons), and learning and conditioning. They study both human and nonhuman animals with respect to their abilities to detect what is happening in a particular environment and to acquire and maintain responses to what is happening.

Experimental psychologists work with the empirical method (collecting data) and the manipulation of variables within the laboratory as a way of understanding certain phenomena and advancing scientific knowledge. In addition to working in academic settings, experimental psychologists work in places as diverse as manufacturing settings, zoos, and engineering firms.

Forensic psychologists apply psychological principles to legal issues. Their expertise is often essential within the judicial system. They can, for example, help a judge decide which parent should have custody of a child or evaluate a defendant's mental competence to stand trial. Forensic psychologists also conduct research on jury behavior or eyewitness testimony. Some forensic psychologists are trained in both psychology and the law.

Health psychologists specialize in how biological, psychological, and social factors affect health and illness. They study how patients handle illness, why some people don't follow medical advice, and the most effective ways to control pain or change poor health habits. They also develop health care strategies that foster emotional and physical well-being.

Health psychologists team up with other health care professionals in independent practice and in hospitals to provide patients with complete health care. They educate health care professionals about psychological problems that arise from the pain and stress of illness and about symptoms that may seem to be physical in origin but actually have psychological causes. They also investigate issues that affect a large segment of society and develop and implement programs to deal with these problems. Examples include teenage pregnancy, substance abuse, risky sexual behaviors, smoking, lack of exercise, and poor diet.

Industrial/organizational (I/O) psychologists apply psychological principles and research methods to the workplace in the interest of improving productivity, health, and the quality of work life. Many serve as human resources specialists, helping organizations with staffing, training, and employee development. They may provide employers with testing and other valid selection procedures in their hiring and promotion processes. Others work as management consultants in such areas as strategic planning, quality management, and coping with organizational change.

Neuropsychologists (and behavioral neuropsychologists) explore the relationships between brain systems and behavior. For example, behavioral neuropsychologists may study the way the brain creates and stores memories,

or how various diseases and injuries of the brain affect emotion, perception, and behavior. They design tasks to study normal brain functions with imaging techniques such as positron emission tomography (PET), single photon emission computed tomography (SPECT), and functional magnetic resonance imaging (fMRI).

Clinical neuropsychologists also assess and treat people. And with the dramatic increase in the number of survivors of traumatic brain injury, neuropsychologists are working with health care teams to help brain-injured people resume productive lives.

Quantitative and measurement psychologists focus on methods and techniques for designing experiments and analyzing psychological data. Some develop new methods for performing analyses; others create research strategies to assess the effect of social and educational programs and psychological treatment. They develop and evaluate mathematical models for psychological tests. They also propose methods for evaluating the quality and fairness of the tests.

Rehabilitation psychologists work with stroke and accident victims, people with intellectual disabilities, and those with developmental disabilities caused by such conditions as cerebral palsy, epilepsy, and autism. They help clients adapt to their situation and improve their lives, and they frequently work with other health care professionals. They deal with issues of personal adjustment, interpersonal relations, the work world, and pain management.

Rehabilitation psychologists are also involved in public health programs to prevent disabilities, including those caused by violence and substance abuse. And they testify in court as expert witnesses about the causes and effects of a disability and a person's rehabilitation needs.

School psychologists are engaged in the delivery of comprehensive psychological services to children, adolescents, and families in schools and other applied settings. They assess and counsel students, consult with parents and school staff, and conduct behavioral interventions when appropriate. Most school districts employ psychologists full time.

Social psychologists study how a person's mental life and behavior are shaped by interactions with other people. They are interested in all aspects of interpersonal relationships, including both individual and group influences, and seek ways to improve such interactions. For example, their research helps us understand how people form attitudes toward others and, when these are harmful—as in the case of prejudice—provides insight into ways to change them.

Social psychologists are found in a variety of settings, from academic institutions (where they teach and conduct research), to advertising agencies (where they study consumer attitudes and preferences), to businesses and government agencies (where they help with a variety of problems in organization and management).

Sport psychologists help athletes refine their focus on competition goals, become more motivated, and learn to deal with the anxiety and fear of failure that often accompany competition. The field is growing as sports of all kinds become more competitive and attract younger children.

THE JOB OUTLOOK

Psychology graduates generally report being pleased that what they studied in school has helped prepare them for both life and work. As a woman who opened her own business shortly after earning a baccalaureate in psychology stated, "After all, psychology is the business of life." Although the majority of those with bachelor's degrees in psychology work in areas other than psychology, they continue to be excited by the changes taking place in the field that relate to what they are now doing.

The U.S. Bureau of Labor Statistics (BLS, 2011) expects that opportunities in psychology will continue to grow over the next decade. "Job prospects should be the best for people who have a doctoral degree from a leading university in . . . [a] field such as clinical, counseling, or health, and those with a specialist or doctoral degree in school psychology. . . . Employment will grow because of increased demand for psychological services in schools, hospitals, social service agencies, mental health centers, substance abuse treatment clinics, consulting firms, and private companies." The push to place health service provider psychologists in community health clinics and as core participants in health care practices will provide opportunities. Psychologists are also needed to work with an aging population and one that is diversifying rapidly.

According to the BLS (2011), "the demand for school psychologists will be driven by a growing awareness of how students' mental health and behavioral problems, such as bullying, affect learning. School psychologists will be needed for general student counseling on a variety of other issues, including working with students with disabilities or with special needs, tackling drug abuse, and consulting and managing personal crisis."

Although psychologists may compete with providers from other disciplines such as psychiatry, clinical nursing, social work, and counseling, "clinical psychologists will continue to be needed to help with the rising health care costs associated with unhealthy lifestyles, such as smoking, alcoholism, and obesity, which have made prevention and treatment more critical. There also will be increased need for psychologists to work with returning veterans" (BLS, 2011).

The BLS also states that "industrial-organizational psychologists can help employers understand their organizations better and sort out restructuring so as to help boost worker productivity and retention rates in a wide range of businesses. Industrial-organizational psychologists will help companies deal with issues such as workplace diversity and antidiscrimination policies. Companies also will use psychologists' expertise in survey design, analysis, and research to develop tools for marketing evaluation and statistical analysis." The need for psychologists' abilities in applied research settings and activities such as survey and market research will be particularly acute in the next decade.

Widespread retirement of government employees at both the state and federal levels will provide openings over the next decade across the board for psychologists, particularly in research, administration, and management roles. Opportunities will be available at all degree levels but particularly at the doctoral level.

U.S. Department of Labor, Bureau of Labor Statistics. (2011). *Occupational outlook handbook* (2010–2011 ed.). Retrieved from http://www.bls.gov/oco/ocos056.htm

Doctoral Graduates

Analyses of 2009 Doctorate Employment Survey data from the American Psychological Association's (APA) Center for Workforce Studies (Michalski, Kohout, Wicherski, & Hart, 2011) found that 72% of responding psychologists who earned their doctorates in 2008–2009 secured their first choice when looking for a job. In addition, at least 73% of the respondents were employed within 3 months of receiving the doctorate. Nearly 40% rated the job market as "good" or as "excellent" and 35% as "fair." Just over three fourths of respondents to the 2009 online survey (the most recent study available) said that they were not underemployed. As might be expected, the highest paid and greatest range of jobs in psychology are available to those with doctorates in psychology. Unemployment and underemployment levels remain below those noted for other scientists and engineers. Few drop out of the field.

In general, career opportunities and employment settings have not varied greatly from those of the previous decade, although the prototype solo clinical practice is less common today than it was a decade or more ago. According to data from the Doctorate Employment Survey (see Table 3 in Michalski et al., 2011), the leading full-time employment settings for those with new doctorates in psychology in 2009 were universities/4-year colleges (25.9%) and hospitals/other human services (25%). Other human service settings included university/college counseling centers, outpatient clinics, and primary care offices or community health centers. About 16% of new doctorates worked in government/VA medical center settings, 10% in business/nonprofit settings, 8% in schools/other educational settings, 6% in medical schools/other academic settings, and slightly less than 6% in independent practice (see chart on p. 14).

Master's Graduates

While the doctoral degree is the standard for independent research or practice in psychology, the number of psychology students who pursue a terminal master's degree has increased sixfold since 1960; master's degrees totaled at least 21,400 in 2008 (National Center for Health Statistics [NCES], 2009). Just under one fifth of master's graduates were full-time students in 2006, and 56% were employed outside psychology (National Science Foundation, 2006).

Graduates with a master's degree in psychology may qualify for positions in school and I/O psychology, although in most states they will be prohibited from using "psychologist" as their job or professional title. By APA policy and licensing laws, the term *psychologist* is reserved for individuals with doctoral education and training. Master's degree holders with several years of experience in business and industry can obtain jobs in consulting and marketing research, while other master's degree holders may find jobs in government, universities, or the private sector as counselors, researchers, data collectors, and analysts. Today, most master's degrees in psychology are awarded in clinical, counseling, and I/O psychology. Two of these three fields—counseling and I/O psychology—enjoy established occupational niches.

Persons with master's degrees often work under the direction of a doctoral psychologist, especially in clinical, counseling, school, and testing and measurement psychology.

Some jobs in industry—for example, in organizational development and survey research—are held by both doctoral- and master's-level graduates. But industry and government jobs that focus on compensation, training, data analysis, and general personnel issues are often filled by those with master's degrees in psychology.

Bachelor's Graduates

According to the CIRP [Cooperative Institutional Research Program] Freshman Survey (Higher Education Research Institute, 2008), psychology was the second most popular undergraduate field in 2008, chosen by 5.1% of incoming freshmen. Only general biology was more popular (chosen by 5.2% of incoming freshmen). When regarded as a single field and not as a constellation of fields (as are business, biology, or education), psychology outdrew all other fields. In 2008, 92,587 students graduated with a bachelor's degree in psychology—although many had no plans to pursue a career as a psychologist (NCES, 2009). Some students stop with a bachelor's degree in psychology and find work related to their college major (e.g., they may be assistants in rehabilitation centers). If they meet state certification requirements, they may be able to teach psychology in high schools.

The study of psychology at the bachelor's degree level is also good preparation for many other professions. In 2008, 5% of recipients of bachelor's degrees in psychology were working in psychology or in an occupation related to psychology. Of the small proportion working in psychology, over 80% were in educational settings, broadly defined.

People with bachelor's degrees in psychology often possess good research and writing skills, are good problem solvers, and have well-developed, higher level thinking abilities when it comes to analyzing, synthesizing, and evaluating information.

People with bachelor's degrees in psychology often possess good research and writing skills, are good problem solvers, and have well-developed, higher level thinking abilities when it comes to analyzing, synthesizing, and evaluating information. Many find jobs in administrative support, public affairs, education, business, sales, service industries, health, the biological sciences, and computer programming. They may also work as employment counselors, correction counselor trainees, interviewers, personnel analysts, probation officers, and writers.

Sources

Higher Education Research Institute. (2008). *2008 CIRP Freshman Survey*. (Available from http://www.heri.ucla.edu)

Michalski, D., Kohout, J., Wicherski, M., & Hart, B. (2011). *2009 Doctorate Employment Survey*. Retrieved from the APA website: http://www.apa.org/workforce/publications/09-doc-empl/index.aspx

National Science Foundation, Division of Science Resource Statistics. (2006). *National Survey of Recent College Graduates, 2006* (Table 2). Retrieved from http://www.nsf.gov/statistics/nsf10318/pdf/tab02.pdf

U.S. Department of Education, National Center for Education Statistics. (2009). *Digest of education statistics* (Table 315). Retrieved from http://nces.ed.gov/programs/digest/d09/tables/dt09_315.asp

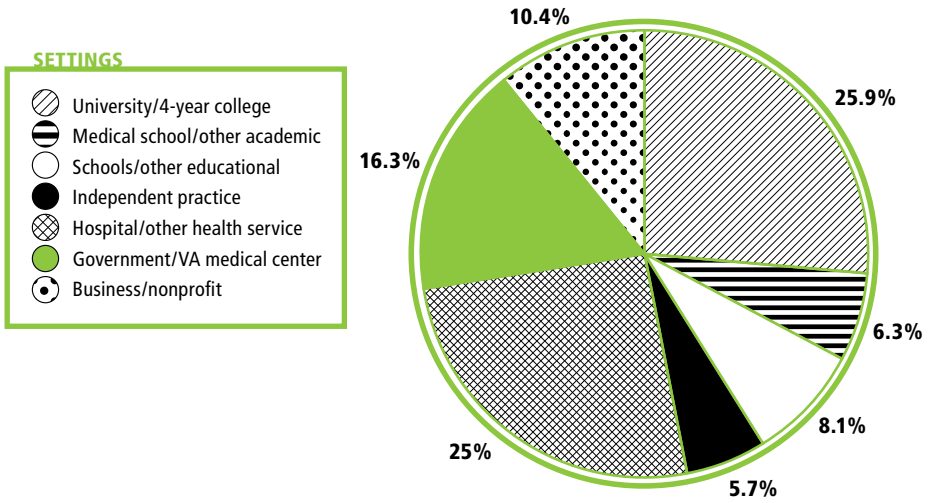
WHAT PSYCHOLOGISTS DO AND WHERE THEY DO IT

Psychology is an extraordinarily diverse field with hundreds of career paths. Some specialties, like caring for people with mental and emotional disorders, are familiar to most of us. Others, like helping with the design of advanced computer systems or studying how we remember things, are less well known.

What all psychologists have in common is a shared interest in the minds and behaviors of both human and nonhuman animals. In their work, psychologists draw on an ever-expanding body of scientific knowledge about how we think, act, and feel, and they apply the information to their areas of expertise.

Many psychologists work in more than one setting. For instance, college professors often consult for industry or see clients on a part-time basis. Although it is possible to identify a host of different work settings, for the purpose of this booklet, we'll consider some of the most prominent examples.

Where Psychologists Work



Note. The chart represents employment settings for those with recent doctorates in psychology. Totals amount to 97% due to rounding and exclusion of 17 "not specified" responses. Adapted from D. Michalski, J. Kohout, M. Wicherski, & B. Hart (2011), *2009 Doctorate Employment Survey* (Table 3). Retrieved from the APA website: http://www.apa.org/workforce/publications/09-doc-empl/table-3.pdf

PSYCHOLOGISTS CONDUCT RESEARCH

Many psychologists conduct research that runs the gamut from studies of basic brain functions to individual behavior to the behavior of complex social organizations. Subjects of such scientific study include nonhuman animals, human infants, both well-functioning and emotionally disturbed people, older persons, students, workers, and just about every other population one can imagine. Some research takes place in laboratories where the study conditions can be carefully controlled; some is carried out in the field, such as the workplace, the highway, schools, and hospitals, where behavior is studied as it occurs naturally.

Much of the laboratory research is conducted in universities, government agencies (such as the National Institutes of Health and the armed services), and private research organizations. Whereas most psychological scientists are engaged in the actual planning and conduct of research, some are employed in management or administration—usually after having served as active researchers.

DR. LINDA M. BARTOSHUK

Psychophysics psychologist, researcher, and university professor

I am a psychologist and Bushnell Professor at the University of Florida (UF). I direct human research in the UF Center for Smell and Taste and collaborate with food scientists and plant geneticists working to make fruits and vegetables more palatable. I study taste and the genetic and pathological conditions that affect taste and thus alter a variety of behaviors (dietary choice, smoking, drinking) affecting health.

I earned my BA at Carleton College. Although I began my college career as an astronomy major, my courses in astronomy got me interested in people's abilities to compare the brightness of stars, and that led to my interest in the senses. I switched my major to psychology. After receiving my PhD from Brown University, I worked at the Natick Army Research labs (where research related to food for military personnel is conducted), then

went to the Pierce Foundation and Yale University in New Haven, CT, and am now at the University of Florida in Gainesville.

Psychology contributes to health in significant ways. As an academic working in the health professions, I have collaborated with dentists and physicians in using psychophysics to quantify symptoms, thereby advancing the understanding of disorders in my field (taste/oral pain) and promoting patient well-being. Psychology and the science supporting it have never been more relevant to the world around us.

I spend a typical workday at my computer and with patients. My students and I design experiments to study the sense of taste, run the experiments, and then analyze the data. Sometimes I serve as a subject in experiments, because I never do an experiment on another person that has not been done on me first.

I believe that to be a psychologist, a good background in mathematics and science is useful, and you need to observe the world around you and yourself. Behavior is fascinating. Psychology includes many subspecialties. The more you learn about them, the easier it will be to pick an area that will use your skills and give you great satisfaction.

I love being a psychologist. We study the behavior we see, but we know how to look beneath the surface to explore mechanisms. We are sophisticated and tolerant thinkers, yet we recognize nonsense. We have an impact on the lives of real people, and we care about them. To me, there is no better way to spend one's life. . . . I feel very lucky to be able to do the work that I love. The best advice that I ever gave myself was to go with my heart!

Adapted from "Cool Careers in Science: Meet Linda Bartoshuk." *Scientific American Frontiers Archives: Fall 1990 to Spring 2000*. Retrieved from http://www.pbs.org/safarchive/5_cool/53c_bartoshuk.html

DR. ROBERT RESCORLA

University professor and research psychologist who studies how we learn

Dr. Robert Rescorla became a psychologist because he likes puzzles. "You see a phenomenon and try to understand it," he says. "I like the logic of designing an experiment, developing a hypothesis, and testing your ideas." Dr. Rescorla studies his favorite phenomenon, learning, at the University of Pennsylvania, where he directs undergraduate studies in psychology and is Christopher H. Browne Distinguished Professor in Psychology. Throughout his career, he has discovered and defined the ways that animals (including humans) learn, especially by the power of association.

His love of research was sparked at Swarthmore College, where one professor encouraged students to conduct their own experiments in visual perception. Recalls Dr. Rescorla, "It was exciting to be the first person in the world to know the answer to something."

After graduating in 1962, he earned a PhD in psychology in 1966 at the University of Pennsylvania. Inspired by a book by one of the field's early researchers, Dr. Rescorla and Dr. Richard Solomon embarked on a classic series of experiments on the mechanisms of learned fear. Their findings have helped to shape effective therapies for treating phobia and other anxiety disorders.

Dr. Rescorla began his teaching career at Yale University. In 1981, he returned to the University of Pennsylvania, where in 1986 he was appointed the James M. Skinner Professor of Science. He studies not only how animals and humans learn that one stimulus signals another, but also how they learn that this relationship no longer holds. Dr. Rescorla also figured out how to measure the strength of learning, the key to documenting his observations.

This lifelong researcher has seen his work help to relieve human suffering. Armed with insights into associative learning, clinical psychologists have developed ways to "extinguish" the phobias that develop when people learn to fear a stimulus because it signals a painful experience.

Dr. Rescorla encourages more undergraduate research because, as he learned, "Once you do it, you're hooked." At Penn, he has chaired the psychology department and been dean of the College of Arts and Sciences. He was elected to the Society of Experimental Psychologists in 1975 and to the National Academy of Sciences in 1985.

For students considering psychology, he recommends a broad liberal arts education and adds, "Take the psychology intro course, and then sample broadly around it so you can find out what psychology is, whether it's right for you, and what particular topic within it grabs you."

Dr. Rescorla also urges students to study more biology and math. "Psychology increasingly has a biological component—not just in the laboratory but in the applied world, for various therapies. Plus, you will need more of a quantitative background."

DR. STANLEY SUE

Clinical psychologist, researcher, and university professor

I am a professor of psychology and the director of the Center for Excellence in Diversity at Palo Alto University. Unlike psychologists who specialize in a technique or a theory, I specialize in a population. Much of my work focuses on Asian American and ethnic minority clients, who often have special needs, especially if they immigrated to the United States.

I went to an all-boys technical high school and wanted to be a television repairman. Within a year, I became disinterested in electronics and woodworking, so I switched schools and tried to prepare myself for college. Along the way, I decided I wanted to become a clinical psychologist even though I was quite naive and didn't know what a clinical psychologist actually did. But I remember always watching a television program called *The Eleventh Hour* that featured both a psychiatrist and a psychologist and thinking that this is what I wanted to do.

I told my father that I was interested in psychology, particularly clinical psychology. He's Chinese from the old country and couldn't understand what a psychologist does and how one could make a living at it. But I persisted and went to the University of Oregon to major in psychology and then to the University of California, Los Angeles for graduate work. Since then, my three brothers have gone into psychology. The oldest brother even married a psychologist!

At the Palo Alto University center, we focus on cultural and group issues involving diversity dimensions such as ethnicity; race; lesbian, gay, bisexual, and transgender issues; gender; and social class. We conduct research, develop programs to promote diversity, integrate such issues into our courses, and recruit and train students to work effectively with diverse groups.

My particular area of interest is to study rates of mental disorders among Chinese people in the United States. Little is known about Asian Americans in this regard. Many people have said that Chinese and other Asian Americans don't have many mental health problems. But we know that they have problems just like any other group of people, although there are some differences in the distribution of disorders.

What we have found generally, however, is that Asian Americans tend to underutilize mental health services and that those who do use the services tend to be very disturbed. This means that Asian American people with mild disturbances tend not to come in until their problems are serious.

We're also trying to determine the factors related to mental disturbances among some Chinese people in this country and the factors that seem to insulate others in this population from mental problems. Several researchers at the center are also studying parent–child conflicts in Asian American families to see if the conflicts are different from those affecting other ethnic families and to identify ways to resolve the conflicts. Other investigators are looking at husband–wife problems to ascertain if they're unique because of cultural differences. One researcher has developed a scale that measures "loss of face," which is a particularly important concept for people of Asian descent; fear of losing face affects how they behave. We are also going to look at how to improve the delivery of effective mental health services to Asian Americans.

PSYCHOLOGISTS STUDY SOCIAL DEVELOPMENT

Developmental psychologists study the many behavioral and psychological changes that occur throughout the life span.

DR. PAMELA TROTMAN REID

Developmental psychologist, researcher, professor, and college president

Developmental psychologists look at the changes that occur across an entire lifetime. It is a fantastic area because you can do so many different things. You can focus on language development, for example, and study why children's speech may not reflect their thinking. You can look at adolescents and the problems they have in establishing identity. Or you can examine families, from how they use discipline to how they develop attitudes.

There is also a growing interest in adult development and aging, partly because of the graying of America and partly because we are beginning to realize that we don't stop growing when we reach puberty. Instead, we continue to change and develop in many areas all our lives. Developmental psychologists can investigate adult learning issues at the workplace or the effects of aging on cognition.

I was always interested in science; even as a child I had played with chemistry sets. At Howard University in Washington, DC, I majored in chemistry and thought about becoming a medical doctor. But because so many of my friends were taking psychology as an elective, I did, too. Psychology, I learned, is about both science and the application of science to people. I fell in love with the subject, switched my major to psychology, and then went to graduate school and earned my doctorate in educational psychology.

As a researcher and professor in psychology for many years, I specialized in social development; the effects of gender and culture were my primary interest. Today, as the president of Saint Joseph College in Connecticut, I still get a great deal of pleasure from teaching and research. I enjoy helping my students prepare for leadership roles by studying how leaders develop and what factors influence their leadership styles from childhood through adulthood.

In some of my past studies, I investigated why girls act in certain ways and why boys behave in different ways. One small body of research had suggested that women and girls are typically more interested in babies than men and boys are. But all this research had been conducted on White children and adults.

So I looked at both Black and White children and found no difference between African American boys and girls! In 8- to 10-year-old middle-class children, the White girls liked the babies (they looked at them, touched them, and smiled at them), the African American girls liked the babies, and even the African American boys liked the babies. Only the White boys appeared uninterested. As often happens, the research led to more questions. Now, instead of asking why girls are more interested than boys in babies, the question became are we socializing White boys so that they don't like babies?

I also conducted research with children who lived in shelters because their families were homeless. I learned about the stresses they undergo so that we can understand how some children cope and others do not. For me, the important thing is that in psychology, you can research the questions that you are interested in, not only those that someone else has posed.

DR. MIGUEL YBARRA

Counseling psychologist and director of a VA substance abuse treatment program

There are many ways to enter the field of psychology, but the best way is to understand your strengths and what it is you want to accomplish. I started my academic career as a music major. One of my professors helped me see that my strengths, however, were in another area. I decided that there had to be a better fit for me in a different career. One day, it occurred to me that most of my friends and family would seek me out to talk about things going on in their lives. I felt I had a natural ability to help people see the options that were before them. It was at that moment that I decided to explore what I could get out of (and offer) the field of psychology.

Having to master statistics and research methodology was an intimidating prospect. In fact, the very idea of having to learn this material was so worrisome that I almost decided not to apply to graduate school at all! But once I started learning the material and applied these skills to real-life situations, it made sense and became enjoyable. Statistics became a tool I would use to actually provide the clinical services for which I was in training. This was the best part of my academic experience because the very thing that almost kept me out of a graduate program became the means to achieving my goals.

During my course work in counseling psychology at the University of Wisconsin—Madison, I was fortunate enough to have worked with one of my professors and participate in a study he was directing. The design of this project was to learn about the use of various coping strategies by middle-school students living and interacting in a multicultural setting. This experience became even more important to me when I realized that we were also searching for ways to get our findings back to the community that had agreed to participate in the study. With great enthusiasm, we presented our findings to the parents and teachers of those students at an open meeting.

Through all of this, I learned that the need for psychologists to bring cross-cultural considerations and multicultural competency to their work is increasing daily because of the changing cultural and ethnic composition of our country. As members of the larger and increasingly diverse society, we need to meet the needs of people from different backgrounds and communities, thus allowing them to build on their strengths. Also, let us not forget the role of language. We must understand the context from which language (and behavior) emanates in order to be successful psychologists, whether we are conducting research, teaching, or providing therapy.

Since completing my doctoral degree, I have worked as a full-time and part-time faculty member and have taught in undergraduate, master's, and doctoral programs and in college counseling centers. I have also been involved with the Veterans Affairs initiative to integrate mental health with primary health care; worked as a consultant for businesses and academic programs; and conducted research. Currently, I am the program director of a VA substance abuse treatment program. Each professional experience has helped to shape my own journey and has added to my satisfaction and success within the field of psychology. My best advice is to seek out diverse experiences that match your interests, be ready to transform a "not-so-great" job description into a great work experience, and never take yourself out of the running to achieve a goal you want to attain.

PSYCHOLOGISTS TEACH AND PROVIDE SERVICES TO STUDENTS

Psychologists provide a number of services—both direct and indirect—to children, youth, and families in schools at all levels, from early childhood education settings through college. Some focus on improving student learning and behavior through research on topics such as motivation and cognitive processes, while others provide psychological services within educational settings. Psychologists work within specialty areas of learning, too, such as the arts and sports.

School psychologists help students with learning or behavior problems in the classroom and serve as members of the interdisciplinary teams that develop individual educational plans for students with learning disabilities, social and emotional issues, or other special needs. They work with students and staff members on schoolwide issues such as bullying prevention, and they consult with teachers on problems in the classroom.

DR. SYLVIA ROSENFIELD

School psychologist, university professor, and consultant

Schools are essential to our democratic society. I find them fascinating as organizations and recognize how important they are to children's learning and mental health. I enjoy solving problems in schools and am never bored.

As an undergraduate at Cornell, I took Urie Bronfenbrenner's child development course and became aware of how much settings contribute to behavior. Years later, after obtaining my degree from the University of Wisconsin in educational psychology, with a major in school psychology, I maintained my focus on settings and learning environments. Over the course of my career, I have worked as a school psychologist in the Madison (Wisconsin) public schools and as a school psychology faculty member at Fordham University in New York City, Temple University in Philadelphia, and the University of Maryland. I

have been engaged in teaching, research, and consultation with state education departments and with school systems around the country. My work has consistently been about enhancing learning environments for staff and students.

Schools today are diverse institutions, reflecting the multicultural nature of our society. There is consensus that schools have a mission to educate all students, including those of color, those with mental health and learning issues, and those whose impoverished backgrounds have limited their learning opportunities. School psychologists play a key role in this essential work. As a faculty member in Fordham University's urban school psychology program, I initiated a bilingual school psychology specialty to reflect our urban mission. We recruited and funded bilingual students and also provided all the school psychology students in the program with a better understanding of how culture and language affect teacher perceptions of students and student outcomes.

School psychologists engage in direct interaction and service to students, as well as focus on prevention (such as bullying prevention) and intervention through consulting with school staff about student concerns. My focus has been on using consultation skills to support school staff in promoting positive student outcomes, particularly for students at risk of developing more severe academic and behavior problems.

Through my work on consultation, I recognized the importance of helping schools develop structures so that staff can support their students' development more effectively and efficiently. My colleagues and I created Instructional Consultation Teams (IC Teams), which we developed at the Lab for IC Teams at the University of Maryland. We embedded evidence-based process skills and content into a team structure and figured out how to help schools implement and sustain IC Teams, which are now conducted in multiple states and school districts.

People spend a large part of their lives in school. When you return as a school psychologist, you see the schools in a new way. Helping to create healthy environments in which children and youth can flourish is a rewarding life's work.

PSYCHOLOGISTS PROMOTE PHYSICAL AND MENTAL HEALTH

Psychologists as health providers span a large and diverse spectrum of subfields. Some psychologists work alone, with patients and clients coming to the psychologist's office. Others are involved in health care teams and typically work in hospitals, medical schools, outpatient clinics, nursing homes, pain clinics, rehabilitation facilities, and community health and mental health centers.

Increasingly, psychologists in independent practice are contracting on either a part-time or a full-time basis with organizations to provide a wide range of services. For example, a psychologist can join a health practice and work with a team of other health care providers, such as physicians, nutritionists, physiotherapists, and social workers, to prevent or treat illness. This team approach, which is likely to become more common in the future, frequently includes efforts to change unhealthy behaviors and ensure that patients follow the recommended treatment. The team also helps patients cope with stress.

Psychologists also instruct students who are training to become health care professionals, such as physicians and nurses, about the psychological factors involved in illness. And they advise health care providers already in practice so that illnesses with symptoms that have a psychological component can be better diagnosed and treated.

DR. DANIEL ABRAHAMSON

Clinical psychologist, administrator, and advocate

It's important to pick a career that suits your temperament and your likes and dislikes. I grew up in a family that values helping people who are less fortunate and less able to take care of themselves. So psychology was a natural choice for me. I studied clinical psychology in graduate school.

I also went into psychology because I thought it would provide me with more variety than any other field. I have been a practicing psychologist, an

administrator, a consultant, and a researcher. I now work for the American Psychological Association (APA) as assistant executive director for state advocacy.

Before coming to APA, I was a clinical psychologist and the administrative director of a large group practice—The Traumatic Stress Institute (TSI)—in Connecticut. At TSI, my colleagues and I dealt with trauma—everything from natural disasters and industrial accidents to physical and sexual abuse. The institute is a model for independent practice because we did more than sit in an office for 50 minutes of psychotherapy with a patient—although we did that, too. But we also did research, training, and community education to help traumatized individuals get their lives back on track as quickly as possible.

At TSI, my colleagues and I valued professional involvement and advocated for public policy that provides services and secures the rights for those who have experienced traumatic events. Over time, I became more involved in advocacy efforts on a number of fronts, primarily through my various roles in the state psychological association and also at APA.

Ultimately, I changed careers and began working full time at APA on a broad range of issues affecting the professional practice of psychology at the state and national levels. For the past several years I've worked on health care reform, changes in health finance and reimbursement as they affect psychological and mental health services, and parity in mental health insurance coverage.

All of these opportunities to advance the practice of psychology stemmed from my earlier role as a practitioner interested in contributing to the field through state advocacy efforts. It is essential more than ever that psychologists think both locally—regarding their individual practices—and globally—concerning how they can contribute to the larger world. Through involvement in a broad range of institutions (e.g., educational, health care, business/corporate, correctional, environmental systems), psychologists can have a significant impact on the psychological well-being of others.

I can't think of a single part of our culture, a single part of the world that we live in, where psychology doesn't have something to contribute. I get excited when I think that I can make a difference in somebody's life. I love the field.

DR. DOROTHY W. CANTOR

Clinical psychologist in independent practice

I like to help people solve their problems. My work as a clinical psychologist with an independent practice in New Jersey allows me plenty of opportunity to do so. I help individuals from teenagers to octogenarians, and some couples, who have varied psychological or relationship concerns.

I earned my PsyD, a professional psychology doctorate, in 1976, was licensed in 1978, and since then have practiced psychodynamic therapy, which assumes that a person's early years are a critical part of his or her current problem and explores them in the context of the patient–therapist relationship.

I listen with the ear of someone who is trained to understand the dynamics of what the person is saying. If medication is indicated for the patient, I coordinate the treatment with a local psychiatrist.

Psychology wasn't my first career. I was originally trained to teach because that's what most women who went to college in the 1950s did. Beginning when my children were in preschool, I earned two master's degrees (in reading education and school psychology) at New Jersey's Kean College. I went on to earn the newly offered PsyD, a doctoral degree designed for people who want to practice psychology, at Rutgers University's Graduate School of Applied and Professional Psychology. It was important that the schools I attended be close to home so that I could combine my education with being a mom—and Rutgers is 35 minutes from home!

I earned my doctorate so that I could be licensed to have a clinical private practice. As a school psychologist, I did a lot of the assessing of problems but never got to help alleviate them.

To be a good psychologist, you should be a good listener, nonjudgmental, smart, and flexible in order to apply scientific theory to people in a nonformulaic way, which takes a certain creativity. I advise students entering the field to

prepare for many years of education, all the way to the doctorate. The rewards are just so great. It's so gratifying to be helpful to people on an ongoing basis.

I am past president of the American Psychological Association and current president of the American Psychological Foundation. I've written many articles and several books, including *Women in Power* (with Dr. Toni Bernay), *What Do You Want to Do When You Grow Up?* and *Finding Your Voice*. And I've appeared as an expert on many television shows, including *Good Morning America, Prime Time Live*, and the *Today* show.

What lies ahead? I expect psychology to become more of a part of the bigger health care system, as people come to understand how mind and body interact. I hope that people will go for mental health checkups the way they go for physical health checkups.

As for my career, my role model was a 90-year-old psychologist who worked until her death. I plan to write a few more books. And then, as always, I'll see what opportunities present themselves. There are just so many opportunities for psychologists.

DR. RODNEY HAMMOND

Health psychologist and CDC violence-prevention program administrator

My passionate interest in helping people live their lives to their fullest potential is what attracted me to psychology. My early training and experiences prepared me for career opportunities that I could scarcely have imagined as an undergraduate in college. Ultimately, I identified as a health psychologist because it is a field that goes beyond traditional mental health and addresses broader health concerns.

When I started as an undergraduate at the University of Illinois at Urbana-Champaign, I hadn't decided on my major. To help finance my education, I took a part-time job in a child development research program sponsored by the psychology department. There, I observed inner-city children in settings designed to enhance their learning. I saw firsthand the contributions psychology can make, and I knew I wanted to be a psychologist.

After completing undergraduate work in psychology, I went on to earn my doctorate, focusing on children, both in school and in the community. When I graduated, there was no such thing as a health psychologist. I started as an assistant professor in a doctoral program in school psychology at the University of Tennessee. But soon I went on to direct a children's program at Meharry Medical College in Nashville. As a psychologist in a medical setting, I could help children with health problems as well as their families and physicians.

At Meharry, I was in charge of an extensive and innovative program with an interdisciplinary staff. We worked with children who had developmental disabilities, dealt with child abuse and neglect, developed partial hospitalization for children with emotional problems, and created prevention programs for youths at risk. I then became assistant dean at the Wright State University School of Professional Psychology in Ohio, where I trained clinical psychologists and directed a program to prevent homicide and violence among minority youths.

Most of my career was spent at the Centers for Disease Control and Prevention (CDC), where for 15 years I served as the director of the Division of Violence Prevention at the National Center for Injury Prevention and Control (I retired in 2011). The division, with its budget of more than $100 million, manages research, surveillance, and programs in intentional injury; homicide, suicide, and youth, family, and intimate partner violence prevention; and rape and sexual assault prevention.

As director of this CDC division, I oversaw the world's largest concentration of public health experts working on violence issues and prevention. These experts come from a variety of fields, including psychology, medicine, sociology, economics, and epidemiology. I was also involved in global efforts to prevent violence through the World Health Organization and Pan American Health Organization.

Through my work, I was able to achieve a career level unprecedented by a psychologist—I was the first psychologist to serve as the director of a division of the CDC. As you can see from my experience and background, my early work as a health psychologist was the basis for—but just the beginning of—this adventure. Psychology is much more than the traditional roles you may be aware of. When you think of a career in psychology, think beyond those limited roles!

DR. PARINDA KHATRI

Clinical psychologist and community health organization director

I was always interested in human behavior; it seemed to be a key component to so many aspects and issues in life. I was also strongly influenced by my father, who was both a sociologist and psychologist. When I was a child, he would talk to me about the work of Freud and B. F. Skinner. I knew words like *classical conditioning* and *super ego* before I reached the 9th grade! I wanted to contribute to society and engage in a variety of activities such as teaching, clinical practice, and research. Psychology offered the opportunity to fulfill these goals in a meaningful way.

After majoring in psychology at the University of Alabama at Birmingham, I graduated with a PhD in clinical psychology from the University of North Carolina at Chapel Hill. I completed a postdoctoral fellowship at Duke University Medical Center, which was an amazing experience. On my first day I joined the cardiac rehab team and talked to patients about health behavior change while walking on a track with them. What a shift from the traditional 50-minute therapy session! From then on I realized that the knowledge and skill base in psychology could be adapted to fit almost any setting and, moreover, could have a significant impact on a person's quality of life, health status, and overall functioning.

Today I am director of integrated care at Cherokee Health Systems (CHS), which is a comprehensive community health organization that provides integrated primary care and behavioral health services in east Tennessee. CHS is both a federally qualified health center and a community mental health center, with a mission of improving the physical and mental health of everyone in our community. As a community health organization, we see everyone in our communities regardless of their ability to pay. Therefore, we are able to bring progressive, evidenced-based health care to everyone, including people who are uninsured. Working in community health means I can fulfill my personal and professional mission to work with the underserved in our communities.

As director, I am responsible for implementing the clinical model of integrating behavioral health and primary care to optimize functioning and quality of life for our patients. I am also involved in teaching and consulting with other organizations as part of CHS's training and outreach initiatives on integrated care. I serve on teams that provide oversight and guidance regarding clinical activities and procedures within the organization. In my leadership role, I am responsible for many of CHS's wellness, chronic care, and research initiatives. As training director of CHS's APA-accredited internship program, I am closely involved with teaching, clinical supervision, and program administration.

On any given day, I may see patients, work on a grant, develop a training schedule, address operational and clinical issues that arise at any of our clinics, provide clinical supervision (i.e., supervise the work of other providers), and participate in a management meeting. I love the variety and stimulation in my work. I get to work with bright, mission-oriented individuals with a range of expertise in different fields, including medicine, behavioral health, and business management.

Working in a community health setting with a mission to the underserved provides tremendous professional and personal satisfaction. Primary care psychology offers exciting opportunities for psychologists to practice in a unique and rewarding setting. It is a significant growth area in the field. My advice to new psychologists: Work hard, be guided by a sense of mission and purpose, think outside of the box, and be open to new possibilities. You will be amazed by the opportunities that will come your way.

DR. CAROL MANNING

Neuropsychologist and university professor

My doctoral degree was in clinical psychology. I do clinical work, research, and teaching at the University of Virginia. All three aspects of my career are very important to me.

For example, I work in a memory disorders clinic as part of a team of neurologists, nurses, and medical technicians. I oversee patient treatment apart from medication. What I learn in my research, I use in my

clinical practice. And in my clinical practice, I learn the important questions to ask in my research.

One of my patients who has Alzheimer's disease is in a clinical drug trial involving an experimental medication. No one knows if he is receiving medication or a placebo, which is something that looks like the medication but is actually inert (i.e., an inactive substance or preparation). I assess this person periodically and also talk with his wife occasionally to determine whether his condition has changed. I test his ability to remember things, and I look to see if the kinds of judgments he makes are the same kinds of judgments you or I would make. I test his ability to know the time, date, and place—to see if he knows generally where he is. I look at his ability to copy drawings and also to remember those drawings. I also check his attention span.

I use computers to run experiments. This morning, I tested a patient's spatial memory: He had to remember where words were placed on the screen. I also use computers for statistics—to analyze what my data mean.

I teach in the Department of Neurology, and some of my work involves supervising graduate students. It's important that my students are truly interested in psychology and in the projects they're working on. They need to think creatively, be determined, and work thoroughly and carefully.

I'm helping one graduate student learn to do therapy and to assess patients. Another graduate student works with me on research studies. She helps me guide people through the research program on the computer. She analyzes data, and she's learned to do statistics and how to design studies. We write papers together for publication.

If you're interested in psychology, I'd advise you to take psychology courses as an undergraduate. And try to work in a research laboratory so that you can get some insight into what the field is really like.

Many of today's students are encouraged to take time off between undergraduate and graduate school because it's a long haul and it takes a lot of determination. Sometimes I think it's nice for people to have a break in there. It takes persistence to earn a doctorate in psychology, along with a great interest in psychological research, science, and people. It takes a long time—but I think it's well worth it!

DR. SUSAN McDANIEL

Clinical psychologist, family health psychologist, and administrator

I was raised in the South during desegregation and have always been interested in the underlying values and behaviors that can bring different individuals, groups, or cultures together. This process is a common thread in my professional life, whether working to strengthen couples and families or in primary care teams with physicians, psychologists, and other clinicians.

My father was an obstetrician/gynecologist who loved being a physician. It was clear to me that I wanted to do meaningful, rewarding work, too. My interest in science came from him. My emotional intelligence came from my mother. Put those with the irrational events of the time I grew up in, and you have the makings of a budding psychologist.

When I went to college in the early 70s, I wanted to study stereotyping and why people generalize across groups. This led to a double major in cultural anthropology and psychology at Duke. I loved studying the effect of culture on behavior and language but thought psychology might be a more practical choice for graduate school. I was fortunate to attend the University of North Carolina at Chapel Hill in clinical psychology, working with many talented clinical and research professors, including William Stiles, with whom I did my dissertation on language (verbal response modes) in psychotherapy. Probably because of my strong southern family, I went to the University of Texas Medical Branch in Galveston for internship and worked with pioneering family psychologists Harry Goolishian and Harlene Anderson. Family therapy made immediate sense to me. It is applied anthropology—understanding individual behavior in the context of the group.

A fascination with mind–body interaction led me to accept a part-time job as a faculty member in the Department of Family Medicine at the University of Rochester (the first woman and first PhD on the faculty) in 1981. These bright, dedicated residents wanted a more organized behavioral science curriculum

that would prepare them for the huge proportion of primary care practice that is psychological in nature. They were also interested in what family therapy had to offer family medicine.

Collaborating closely with family physician Thomas Campbell, we developed a practical curriculum that taught family medicine residents to evaluate the mental, behavioral, and interpersonal difficulties of their patients along with their biomedical problems. We combined the biopsychosocial approach with a family systems approach that is particularly well suited to primary care. The problems people bring to their primary care doctor aren't always physical and are often difficult to evaluate. Having systems skills to understand the individual, family, and community components is extremely helpful for assessment and successful treatment planning. It is also useful in enlisting family input and support and in promoting team functioning among the disciplines that make up the primary care team.

The Family Medicine Department has been a wonderful home. I see my own patients in the primary care setting (and see many patients who will not enter the traditional mental health system). My systemic/family skills are now put to use in promoting healthy faculty functioning, leadership coaching, and helping to transform primary care practice into patient-centered medical homes that are psychologically healthy.

The year after I joined the family medicine faculty (1982), I joined the psychiatry faculty when a family therapy training program began there. I eventually took over as division chief and developed the Institute for the Family, which has clinical, training, and research functions. We train family medicine, psychiatry, pediatric, and internal medicine residents. By design, faculty members work both in the Institute and in another clinical department (i.e., ob/gyn, pediatrics, the epilepsy center, internal medicine, family medicine) to provide behavioral health at the point of service as part of a heath care team.

Health care—patients, families, and other health professionals—needs psychologists. There is enormous opportunity for psychologists with clinical, systems, health, and research training. Some opportunities are defined and posted, others (like the coaching program) are innovative and an obvious fit with our skill set. Like my father, I have meaningful and rewarding work that I love. You can, too.

PSYCHOLOGISTS STUDY THE WORK ENVIRONMENT AND PERFORMANCE ISSUES

Anywhere people work, and anything they do while at work, is of interest to psychologists. Psychologists study what makes people effective, satisfied, and motivated in their jobs; what distinguishes good workers or managers from poor ones; and what conditions of work promote high or low productivity, morale, and safety.

Some psychologists design programs for recruiting, selecting, placing, and training employees. They evaluate, monitor, and improve performance. They help make changes in the way the organization is set up. Others help design the actual tasks, tools, and environments people must deal with when doing their jobs. These specialists can also help design the products that organizations create and conduct research related to product design. For example, they play a big role in making computer hardware and software more user friendly.

Psychologists with training in mental health and health care also deal with the health and adjustment of individuals in the work setting. They work with employee assistance plans that provide help with drug or alcohol addiction problems, depression, and other disorders; they also foster healthy behavior. Others work on performance issues in areas such as sport psychology, where they may provide athletes with counseling, work with them to improve motivation and performance, explore psychological considerations in sports injuries and rehabilitation, and perform a range of tasks related to sports performance and education.

DR. ELIZABETH KOLMSTETTER

Industrial/organizational psychologist, researcher, and senior executive

If we're going to keep up with the "bad guys," we need to keep our workforce skills, knowledge, and competencies continuously developing. As an industrial/organizational (I/O) psychologist, I helped lead the drive to heighten airport security after September 11, 2001. This

involved the largest civilian mobilization effort in the United States—to hire more than 50,000 airport screeners for the government in less than a year. The undertaking, called for in the Aviation and Transportation Security Act that President Bush signed into law soon after the attacks, sought to strengthen airport security screening by federalizing it and enhancing the workforce skill standards.

At that time, I was the director of Standards, Testing, Evaluation, and Policy for the newly formed Transportation Security Administration (TSA). I created a team of I/O psychologists, HR professionals, medical experts, and trainers to develop higher standards and the accompanying tests for screeners' cognitive, customer service, X-ray detection, and physical abilities. Using future-oriented job analyses, the team validated new post–9/11 skill standards for every aspect of the new screener rotational job design and then designed an assessment process, including automated application screening, computer-based tests, and in-person structured interviews and medical evaluations, that could process masses of applicants efficiently. Applying the newly established standards, the TSA processed more than 1.8 million applications and hired and trained about 50,000 screeners by the congressionally mandated one-year deadline. Throughout the process, the team faced many obstacles, but we did get it done—we raised the standards for the workforce and national security, and we did it against unbelievable odds.

During my nearly 6 years with the TSA, I developed numerous testing and assessment programs for screeners, law enforcement officers, and armed pilots; implemented enhanced training, including the automated Learning Management System; implemented a mandatory, annual certification program for all screeners; instituted a pay-for-performance program; and designed and implemented a career progression program for the screeners.

In 2007, I became the deputy associate director of National Intelligence for Human Capital at the Office of the Director of National Intelligence (established in 2005). I help to drive the collaboration and integration of the 17 agencies that make up the Intelligence Community (IC). My work includes setting common competency directories for the occupations of the IC, supporting culture change through common performance standards and appraisal processes, developing common leadership programs and succession management processes, establishing a consistent workforce planning template and annual process, and designing a common professional development framework and associated metrics.

It is very rewarding to know that the programs I build as an I/O psychologist touch every employee and greatly improve the workplace. I continuously see how our work directly improves the nation's ability to enhance and ensure national security during this most challenging time in our history. A lot of it has to be done with creativity and innovation.

DR. DAVID SIROTA

Industrial/organizational psychologist and consultant

When I began my career as an industrial/organizational (I/O) psychologist, there was an emphasis on testing—ability testing, personality testing, and so on—in an effort to put the right person in the right job. Today, the emphasis is turning to establishing the atmosphere most conducive to productivity and quality work.

The field has become extremely influential—starting in the late 1970s—in part because of the overwhelming competition from Japan and the success of their products. Studies indicated that Japanese companies tended to manage the way I/O psychologists say people should be managed.

Most I/O psychologists maintain that people go to work wanting to do good work. Nevertheless, when we look at a company that has a problem—let's say, a drop in customers or a large turnover in labor—we see large percentages of people not working very hard. When we analyze what causes people to lose their motivation, the answer usually has to do with how they're being managed. For example, if management treats employees like children or criminals, the employees are likely to become demoralized.

I had wanted to be a psychologist since I was a psychology major at the City College of New York (I originally thought I would go into engineering). One great influence on me was my father. He was a strong union man. From him I learned that workers' opinions are very important to a company's overall well-being. While earning my doctorate in social psychology at the University

of Michigan, I also became enamored of survey work at the university's Institute for Social Research.

I was an I/O psychologist for IBM for 13 years and then set up my own consulting firm, Sirota and Associates, in New York City. (I sold the firm a few years ago.) It is now called Sirota Survey Intelligence and does work for companies, government agencies, and nonprofits all over the world. Earlier in my career, I also taught at a number of universities, such as MIT and the Wharton School.

My particular branch of the field focuses on data collection. We diagnose an organization's problems by surveying people in the organization through questionnaires, informal interviews, focus groups, or a combination of all three methods. Why do employees stay with the company? What helps them produce quality products or quality service? Do they have the right training, the right equipment, the right management, the right whatever? Does the way management treats employees cause them to feel good or bad about the company's customers? Often we interview the customers, too. All these variables constitute the heart of what we do.

We come back to management with our analysis. We try to be candid, but not abrasive, pointing out what's being done well and the opportunities for improvement. We then try to get the managers involved in coming to their own solutions.

Unlike a doctor who finds out what's wrong with you and then writes a prescription, most I/O psychologists want people to become their own doctors. We're not necessarily interested in people liking each other or becoming "nice guys," per se. Of course, it's good if they do, but what we want is for them to deal with what has to be done in terms of business objectives.

DR. ADAM SHUNK

Neuropsychologist and sport psychologist

There are many different paths that may lead to a career in psychology, and many opportunities that present themselves along the way. In my case, my passion to work as a psychologist in athletics guided my journey to create my dream job.

I always knew as a child that I loved sports and wanted my career to involve athletics. I was a dedicated high school athlete who was fortunate enough to earn an athletic scholarship to the University of North Carolina. After college, I followed my passion for sports to become a professional track-and-field athlete who competed on the international circuit for 4 years. My involvement in sports and my experience as a coach helped me understand the sports culture.

Early in my academic training, I realized that I wanted to focus on positive psychology and help individuals in their pursuit of excellence. In my studies, I was drawn to biology and the relationship between brain and behavior. Although I was primarily trained as a neuropsychologist through my formal education, I emphasized and integrated sport psychology course work into my curriculum at both the undergraduate and graduate levels, and focused rotations were part of my internship and postdoctoral training. I had to be innovative in creating a training program that met formal guidelines in neuropsychology and also provided appropriate training in sport psychology. It worked out beautifully for me, as I found a career that allowed me to pursue my passion for sports and neuropsychology with a population focused on athletic achievement.

My schedule differs on a daily basis, and flexibility is an essential part of my job. For example, 2 days a week I work in an athletics setting at Purdue University, where my time is spent providing counseling and assessment services in the athletic department. As a sport psychologist, I have been trained in the applied practice of sport and performance psychology, and I work with "elite" performance issues and positive psychology applications. Another focus of sport psychology is to provide individual counseling for mental health issues and consultation services for coaches, teams, and administrators.

My job often involves travel, and I frequently work with clients on weekends and in the evenings to accommodate their busy schedules. The focus of sport psychology is to use psychological interventions to enhance athletic and overall performance. The nature of athletics creates some specialized needs for athletes, who must manage and deal with rigorous practice, workout schedules, extensive travel, injuries, fatigue, high expectations, and media exposure, in addition to normal stressors.

If you are interested in becoming a sport psychologist, you'll need to establish proficiency within the field. APA's Division 47 (Exercise and Sport Psychology) provides appropriate guidelines for establishing competency as a sport psychologist.

Pursuing my interests in neuropsychology and sport psychology has certainly been challenging, but it has taught me that if you know what you want to do, there is always a way to make it happen.

GETTING READY TO WORK IN PSYCHOLOGY

If you are interested in a career as a psychologist, you have to complete graduate school in psychology. While most graduate programs in psychology are in academic departments located in university colleges of arts and sciences, some are located in professional schools of psychology, education, business, medicine, and engineering.

Take time to research your choices. The program should match your interests. Although most psychology departments offer a breadth of education in the discipline of psychology, they vary in their strengths or areas of emphasis. You need to find out what those are and match them to your graduate education interests. The areas of expertise and research interests of individual faculty members may be a guide to you in matching your career interests with a specific area of research or practice in psychology.

A graduate or professional school's catalog, brochures, and website are generally the best and most current sources of information about the nature of each graduate program and its program and admission requirements. A composite source of such information is also available in the American Psychological Association (APA) publication *Graduate Study in Psychology*, which can be ordered from APA via e-mail (order@apa.org), telephone (800-374-2721), or online (www.apa.org/pubs/ordering.aspx).

Throughout the application process, discuss your plans with an advisor or undergraduate faculty members. Apply to a number of programs that offer you a reasonable chance of acceptance. For more information, contact the APA Education Directorate at 750 First Street, NE, Washington, DC 20002-4242 (e-mail: education@apa.org / Web: www.apa.org/ed).

High School Preparation

A strong college preparatory high school education is a good beginning for a career in psychology. High school psychology courses, whether Advanced Placement, International Baccalaureate, or regular psychology courses, can give you an overview of the field. In addition, courses in science, math, English, history, social studies, and a foreign language are important. Science and math are particularly important because they provide the necessary skills for research

and analysis in college psychology courses. You can also conduct a research project in psychology (for more information, visit www.apa.org/education/k12/science-fair.aspx), find a volunteer job where psychologists work, or read about psychology in newspapers and magazines to explore the field. APA's *Monitor on Psychology* monthly magazine—available by subscription—is a great source of information for anyone interested in the field. Do not be misled, however, by popular stereotypes of the field. Psychology is a broad behavioral science with many applications.

Bachelor's Degree

Most undergraduate programs require a blend of science and liberal arts courses for a bachelor's degree in psychology. The courses usually include introductory psychology, research methods, and statistics. Other required courses may be in learning, personality, abnormal psychology, social psychology, developmental psychology, physiological or comparative psychology, history and systems, and tests and measurement. Typically, you will be ready to take electives in psychology by the time you are a college junior. This is a good time to make graduate school plans that so you can make wise choices about future courses and extracurricular activities during the last 2 years of college. Only about 15% of graduate programs in psychology require an undergraduate psychology major. However, most graduate programs require at least 18 credits of basic course work, including statistics, research methods, and a lab course.

The Value of the Undergraduate Degree

Psychology majors, whether they have gone on to careers in psychology (the majority do not) or other fields, cite courses in the principles of human behavior as especially important to life after college. The additional insight gained from these courses helps them, whether they are functioning as parents at home, managers on the job, or professionals in other fields.

Many bachelor's degree holders credit their college psychology courses with teaching them how people, including themselves, learn. "I use information on learning theory every time I conduct a training session for my employees," says a manager in a consumer products company.

Above all, it is the rigorous training in the scientific method—the need to do thorough, objective research, analyze data logically, and put forth the findings with clarity—that stands psychology majors in good stead as they pursue their future careers.

Graduate School

Most graduate departments make entrance decisions on a variety of factors, including test scores, GPA, course selection, recommendations, and practical experience. Most departments furthermore require that you take a standard aptitude test, usually the Graduate Record Examination (GRE). Programs vary in the weight they attach to test scores. In August 2011, the GRE introduced a new scoring system. Scores now range from 130 to 170, measured in 1-point increments. Contact the psychology office at the schools to which you are applying to determine if your GRE scores will qualify you for consideration by those programs. Competition for spaces in graduate school is keen.

Master's Degree

Undergraduate course requirements for a terminal master's degree are relatively few: usually, a background in introductory or general psychology, experimental psychology with a laboratory course, and statistics. The university usually takes the undergraduate grade point average into account as well.

The top three programs for terminal master's degrees are clinical psychology, counseling psychology, and industrial/organizational (I/O) psychology. In programs such as I/O and social psychology that include a heavy emphasis on research, facility with research methods, statistics, computers, and technology is important. Course work at the master's level often also includes study in ethics, assessment, program evaluation, and personality-related topics.

A master's degree in psychology, along with preparation in the natural sciences or mathematics, is increasingly valued by doctoral programs in psychology. Data indicate that those who enter a doctoral program with a master's degree are more apt to complete the program than those who do not have a master's. Each doctoral program decides which credits earned at the master's level will be accepted for transfer. Occasionally, students need to repeat some course work. Some institutions will not accept a master's degree from any school other than their own. For these reasons, it is important to ask questions about these and other issues early in the application process.

Doctoral Degree

Each graduate program determines its own entrance requirements. Some doctoral programs require applicants to have a master's degree in psychology. More commonly, students can enter the doctoral programs with a bachelor's degree and work directly on a doctoral degree.

Most doctoral degrees take 5–7 years to complete. Some institutions require their students to complete their doctoral studies within 10 years of admission to the institution. The sequence of education and training in a doctoral program depends on the area of the degree in psychology and the emphasis placed on research productivity for the degree and program. You will need to check on the specific requirements for the degree of interest. In addition, you must pass a comprehensive exam and write and defend a dissertation or other scholarly product.

If you want to be a professional psychologist in clinical, counseling, or school psychology, you will also have to complete a one-year internship as part of your doctoral study in these areas of practice. Accredited doctoral programs are required to provide information on their websites about the match rate of their students-to-internship placements. Some universities and professional schools offer a PsyD degree in lieu of the traditional research doctoral degree (PhD) or EdD degree. These PsyD degrees, with their emphasis on clinical psychology, are designed for students who primarily want to do clinical work exclusively.

The Importance of Accreditation

Accreditation is the mechanism used to ensure educational quality at the institutional and programmatic level, as appropriate. At the institutional level, there are regional and national accrediting agencies. There are six regional accrediting bodies that accredit colleges and universities in different geographic regions. National accrediting bodies accredit institutions or specific vocations. Specialized and professional accrediting bodies generally accredit at the program level. To ensure the accrediting body acts in a reputable manner, both the U.S. Department of Education and the Council for Higher Education Accreditation (CHEA) recognize —or "accredit"—the accrediting bodies.

Membership in APA requires that one's education and training occur in a regionally accredited institution. Accreditation of programs in psychology occurs only for the specific practice-related areas of clinical, counseling, and school psychology (as well as combinations of these areas). As such, most state licensing boards in psychology require, at a minimum, an applicant to have completed a program in a regionally accredited institution. Many also require graduation from an accredited program.

The APA Commission on Accreditation (CoA) is recognized by both the U.S. Department of Education and the CHEA as an accrediting body that meets their standards of recognition. The CoA accredits doctoral programs in clinical, counseling, and school psychology as well as programs that combine these areas; internship programs in professional psychology; and postdoctoral residency programs in professional psychology and in specialty areas. Increasingly, employers and health services reimbursement companies require that the psychologists whom they employ or reimburse be graduates of programs in professional psychology that are accredited by the APA CoA.

If You Need Financial Aid

You may be able to get financial aid to attend both undergraduate and graduate school. Assistance comes in different forms: fellowships, scholarships, grants or subsidies, work study programs, federal loans, and teaching or research assistantships. Graduate assistantships and work study require part-time work.

In many PhD programs, financial aid packages that include tuition, some benefits, and a stipend are available. Students applying to PhD programs will want to check on the availability of such packages and their eligibility for them. For those accredited programs in professional psychology (clinical, counseling, and school), the program must provide information on its website about cost, financial aid, time to degree, attrition, and so forth.

Students seeking financial aid for a graduate degree should get advice as early as possible. Consult with both the psychology office and the office of financial aid on your own campus and also with the office of financial aid at the school to which you are applying. Students of ethnic minority background should also contact the APA Minority Fellowship Program: www.apa.org/pi/mfp.

Licensure and Certification

You must be licensed as a psychologist for the independent practice of psychology anywhere in the United States or Canada. Before granting you permission to take the licensing exam, the state licensing board will review your educational background. A doctoral degree does not automatically make you eligible to sit for the licensing exam; requirements vary from state to state. States require, at a minimum, that the doctorate be in psychology or a field of study "primarily psychological in nature" and that it be from a regionally accredited institution. You must also have had at least 2 years of supervised professional experience. Information about state and provincial licensing requirements may be obtained from the Association of State and Provincial Psychology Boards (ASPPB) at the following addresses: P.O. Box 3079, Peachtree City, GA 30269 or www.asppb.org.

APA RESOURCES FOR STUDENTS

The American Psychological Association—an important resource center for psychologists and those studying to be psychologists—has worked for more than 100 years to advance psychology as a science, as a profession, and as a way to promote health and human welfare. APA is the world's largest psychological association, with more than 150,000 members and affiliates.

Student Affiliates

Undergraduate and graduate students taking courses in psychology are eligible for membership in APA as student affiliates. Student affiliates receive subscriptions to the *American Psychologist* and the *Monitor on Psychology*. In addition, members in the American Psychological Association of Graduate Students (APAGS)—all graduate students, and undergraduates who opt to pay the graduate student rate—get *gradPSYCH*, the quarterly magazine written especially for students. Both the *Monitor* and *gradPSYCH* cover information psychologists need to succeed in their careers, as well as extensive job listings. Student affiliates may purchase APA publications at special rates and attend the APA annual convention at a reduced registration fee. For more information, see www.apa.org/about/students.aspx.

APAGS

All graduate student affiliates of APA are automatically members of the American Psychological Association of Graduate Students (APAGS), created in 1988 as a voice for psychology students within the larger association. (Undergraduates can join APAGS by paying a small additional fee.) APAGS was formed by graduate students as a means of establishing communication between students and other members of the psychological community, including universities, training centers, and other members of the APA governance structure, in order to advocate on students' behalf. APAGS represents all graduate study specialties of the discipline and is run by student leaders elected by the APAGS membership. In addition to sponsoring a variety of other initiatives, APAGS sponsors programming at the APA annual convention and distributes a quarterly magazine (*gradPSYCH*) to its members. Please visit www.apa.org/apags for more information.

Student Membership in APA Divisions

APA student affiliates are encouraged to apply for affiliation in one or more APA divisions. The divisions bring together psychologists of similar or specialized professional interests. You may obtain more information about APA divisions at www.apa.org/about/division.

APA Office of Ethnic Minority Affairs

The APA Office of Ethnic Minority Affairs (OEMA) is a central resource clearinghouse for students of color interested in pursuing careers in psychology. Information and materials for students who are at any stage in the psychology education pipeline may be accessed via OEMA's Web page (www.apa.org/pi/oema/resources/students.aspx). For example, students of color in community college might be interested in any one of the *Psychology Education and Careers* guidebooks, a series which includes a guidebook for high school students of color interested in a career in psychology. Undergraduate students of color may find the links to potential funding sources, honor societies in psychology—especially Psi Alpha Omega—and OEMA's internship program useful. Graduate students of color and postdoctorates could benefit from information about the Jeffrey S. Tanaka Memorial Dissertation Award in Psychology; the CEMRRAT Richard M. Suinn Graduate Minority Achievement Award, which honors graduate psychology programs that demonstrate excellence in the recruitment, retention, and graduation of students of color; and other career and professional development opportunities. Links to the four major ethnic minority psychological associations can also be found on the Web page. For more information, visit www.apa.org/pi/oema.

APA Minority Fellowship Program

The APA Minority Fellowship Program (MFP) provides financial support, professional development activities, and guidance to promising doctoral students and postdoctoral trainees, with the goal of moving them toward high achievement in areas related to ethnic minority behavioral health services.

The Mental Health and Substance Abuse Services Fellowship provides fellows with financial support; professional development; mentoring; potential support for tuition, health insurance, and the dissertation; internship application assistance; and lifetime access to the MFP network. Predoctoral fellowships support training for doctoral students in clinical, counseling, school, or related psychology programs that prepare them to provide behavioral health services or

develop policy for ethnic minority populations. Postdoctoral fellowships support the training of early career doctoral recipients who have primary interests in the delivery of behavioral health services or policy related to the psychological well-being of ethnic minorities.

The MFP also sponsors the Psychology Summer Institute, a week-long intensive training for advanced doctoral students and early career psychologists that provides mentoring and career development to assist participants in developing projects on ethnic minority issues. More information on psychology fellowships and programs may be found on the MFP Web page: www.apa.org/pi/mfp.

Publications

APA publishes about 60 peer-reviewed journals and more than 800 books in the major interest areas in psychology. APA also produces several electronic databases—PsycINFO, PsycARTICLES, PsycBOOKS, PsycEXTRA, PsycCRITIQUES, PsycTESTS, and PsycTHERAPY. PsycINFO contains abstracts of the psychological literature from 1887 to present. PsycARTICLES and PsycBOOKS contain the full text of journals and books published by APA and allied organizations from the mid-1800s to the present.

APA produces two magazines: the *Monitor on Psychology,* sent to all members (including student affiliates) 11 times a year, and *gradPSYCH,* APA's graduate student magazine, published 4 times a year. The *Monitor* provides information on the science and practice of psychology and how psychology influences society at large; it also provides extensive job listings. *gradPSYCH* is a membership benefit of APAGS, the student organization within APA. *gradPSYCH* provides timely articles about emerging trends in psychology practice, research, education, and the nation's marketplace and infrastructure as they affect students and their future careers; employment and salary data profiles of innovative psychology careers; cutting-edge information on graduate training and supervision, including internships, postdocs, and dissertations; and classified advertising to help students find internships, fellowships, postdocs, and other career opportunities.

To help individuals negotiate the sequence of activities involved in becoming a psychology student and a psychologist, APA has developed a line of books for undergraduate and graduate students as well as those who are just now planning to go to college.

Psychology as a Major: Is It Right for Me and What Can I Do With My Degree? offers a comprehensive picture of psychology and its subfields and helps prospective and current students better understand themselves and their motivations for pursuing study in the field. *Career Paths in Psychology: Where Your Degree Can Take You* (2nd ed.) offers psychologists' perspectives on 19 different graduate-level careers in psychology. Undergraduates gain a competitive edge by reading *The Insider's Guide to the Psychology Major: Everything You Need to Know About the Degree and Profession*, which, like a good mentor, motivates and empowers them with information and interactive tools to proactively chart their educational careers and increase their chances of success. *What Psychology Students Could (and Should) Be Doing: An Informal Guide to Research Experience and Professional Skills* zeroes in on strategies for actively participating in research and the real world of psychology, so that undergraduates can distinguish themselves in the realms of graduate school and the workforce. *Your Practicum in Psychology: A Guide for Maximizing Knowledge and Competence* prepares undergraduate students for field placement in mental health settings by providing a wide range of both practical and theoretical information.

For psychology students who do not have graduate school in their immediate plans, *Finding Jobs With a Psychology Bachelor's Degree: Expert Advice for Launching Your Career* shows how to leverage their bachelor's degree to find a career with intellectual, emotional, and perhaps even financial rewards.

Students interested in graduate school find that *Getting In: A Step-by-Step Plan for Gaining Admission to Graduate School in Psychology* helps to guide their decision making, structure the application process, and maximize their chances of being accepted and getting financial aid. *Graduate Study in Psychology* complements *Getting In* by summarizing more than 600 programs of study in psychology, requirements for admission for each program, deadlines for applications, and other relevant details about specific programs in the United States and Canada. *Applying to Graduate School in Psychology* inspires readers to home in on their program choices. Through personal accounts from both peer and expert perspectives, it illustrates the ins and outs of applying and preparing for the graduate school experience and the commonalities and differences among student experiences from a variety of academic institutions and programs.

Surviving Graduate School in Psychology: A Pocket Mentor helps students master the complexities of graduate school life (such as managing money, maintaining personal and professional relationships, and navigating departmental politics) as they transition from student to psychologist.

International students considering studying psychology in the United States will find resources tailored to their needs in *Studying Psychology in the United States: Expert Guidance for International Students*. It weighs the pros and cons of studying psychology in the United States and provides direction on finding university resources geared toward international students, financing one's education, handling visa and work permit matters, cultural considerations, mentoring relationships, academic development, internships and training, and whether to pursue employment in the United States or abroad.

The Publication Manual of the American Psychological Association, Concise Rules of APA Style, and *Mastering APA Style: Student's Workbook and Training Guide* help both undergraduate and graduate students with their class papers and, for those who go on to graduate school, prepare them to submit articles to psychology journals. The *Publication Manual* is often required reading for students in psychology and many of the other social sciences. Spanish-language versions of each of these essential books are available. Undergraduate students will find detailed, step-by-step help with writing papers in *Undergraduate Writing in Psychology: Learning to Tell the Scientific Story,* including such topics as how to craft a research question or thesis; how to search, analyze, and synthesize the relevant literature; how to draft specific parts of the paper; how to revise; and how instructors gauge the quality of a paper. For undergraduate students in research methods classes, as well as graduate students and early career researchers, *Reporting Research in Psychology* provides practical guidance on journal article reporting standards (JARS) and meta-analysis reporting standards (MARS)—standards which were designed to make the reporting of results comprehensive and uniform. Examples drawn from articles published in APA journals are paired with engaging and helpful commentaries.

Additional resources to help both undergraduate and graduate students include *Presenting Your Findings: A Practical Guide for Creating Tables* (English and Spanish versions) and *Displaying Your Findings: A Practical Guide for Creating Figures, Posters, and Presentations*.

Reading and Understanding Multivariate Statistics and *Reading and Understanding More Multivariate Statistics* help graduate students understand the scientific articles they will be required to read as a major part of their training. Because these books clearly explain which multivariate statistics are most appropriate for which kinds of research questions, they also help prepare students for graduate statistics courses and for eventually conducting their own research.

Dissertations and Theses From Start to Finish: Psychology and Related Fields gives students essential guidance on what is perhaps the most challenging task of their graduate career. This easy-to-follow book covers such areas as choosing a topic, finding a chairperson for a dissertation or thesis committee, preparing a proposal, designing and conducting the research, writing the dissertation or thesis, and defending it. *Finish Your Dissertation Once and for All!* combines psychological support with a project management approach to equip students to overcome negative thoughts, feelings, and behaviors; to work effectively with dissertation chairpersons and committees; and to practice self-care on the dissertation journey. Students struggling to wedge writing into a frenetic academic schedule will appreciate the practical, light-hearted, and encouraging tone of *How to Write a Lot,* which shows readers how to overcome motivational roadblocks and become prolific without sacrificing evenings, weekends, and vacations.

Research has shown that students who are mentored enjoy many benefits, including better training, greater career success, and a stronger professional identity. *Getting Mentored in Graduate School* advises students on how to find a mentor and get the most out of that relationship.

Doctoral-level students will find *Internships in Psychology: The APAGS Workbook for Writing Successful Applications and Finding the Right Match* an invaluable guide to successfully navigating the internship application process. Helpful checklists, sample real-life application materials, and realistic advice for writing cover letters are included.

Psychology Licensure and Certification: What Students Need to Know is the definitive resource on licensure and certification in psychology. Here, students get the lowdown on licensure, internships, certification, and more. There are resources for preparing to take these tests, cautions about what to look for in programs and internships that provide training for licensing and certification, factors to be aware of such as mobility of licensure, and advice in many areas not readily available in all graduate programs.

Finally, *Psychology 101½: The Unspoken Rules for Success in Academia* and *The Compleat Academic: A Career Guide* both provide sage advice to future psychologists and young psychologists in academia by passing along some of the "tacit knowledge" that can make the difference between success and failure in a new career.

Many public and university libraries carry these books. You can also order them or other books from APA's extensive catalog by calling 1-800-374-2721 (in Washington, DC, call 202-336-5510). Books may also be ordered by e-mail via order@apa.org.

APA's Center for Workforce Studies

APA's Center for Workforce Studies (CWS) (www.apa.org/workforce/index.aspx) collects, analyzes, and disseminates information relevant to psychology's workforce and education system. CWS provides data on salaries, employment, sources of support and debt, and other topics of interest to those pursuing a career in psychology.

APA on the Internet

APA.org (www.apa.org) is APA's home page on the Web. It contains information for psychologists, psychology students, the media, and the general public, including a searchable resource listing of grants and scholarships.

APA's Online Career Center

PsycCareers (http://jobs.psyccareers.com), APA's online career resource, provides up-to-date career information and job listings for psychologists. PsycCareers offers in-depth career services and tips on professional development, interviews, and job searching. There are jobs listed for every career stage, including fellowship, internship, early career, and experienced levels, as well as in a wide range of psychology disciplines. Both full-time and part-time opportunities in practice, at world-renowned institutions, and with industry leaders are available on the site.

Job seekers can put their social media skills to use and get immediate access to all the benefits of PsycCareers on the APA Facebook page (www.facebook.com/AmericanPsychologicalAssociation) under the Careers tab. They also benefit from PsycCareer's membership in the National Healthcare Career Network, which offers additional postings from numerous other job boards, including those from the American Hospital Association, the National Association of Social Workers, and various APA-affiliated state-level psychological associations. Not only do candidates have the ability to search through and apply to jobs directly on the site, but they can also upload resumes so that employers can locate them as well. These benefits are free to those who create an account. PsycCareers can easily be found from any page on the APA.org website by clicking on the Careers heading.

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