

Specialty Areas in Psychology

Because psychology is such a complex and wide area of study, just as in medicine, the psychologist must specialize in a particular field or with a particular group of clients or patients. Here is a list of some of the areas of specialization in psychology for which there are specific graduate training programs.

Clinical Psychologists assess and treat mental, emotional, and behavioral disorders. These range from short-term crises, such as difficulties resulting from adolescent rebellion, 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: youngsters, ethnic minority groups, gays and lesbians, and the elderly, for instance. 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 does the mind represent reality? How do people learn? How do 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.

Counseling psychologists help people recognize their strengths and resources to cope with their problems. Counseling psychologists 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 life stages. Counseling psychologists 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 elderly 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 diversity of race, ethnicity, and culture that makes 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 eyestrain? 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.

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), learning and conditioning, and psychophysics (the relationship between the physical brightness of a light and how bright the light is perceived to be, for example). Experimental psychologists 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 in court. 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 to change poor health habits. They also develop health care strategies that foster emotional and physical well-being.

Psychologists team up with medical personnel in private practice and in hospitals to provide patients with complete health care. They educate medical staff 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.

Health psychologists also investigate issues that affect a large segment of society, and develop and implement programs to deal with these problems. Examples are teenage pregnancy, substance abuse, risky sexual behaviors, smoking, lack of exercise, and poor diet.

Industrial/organizational psychologists apply psychological principles and research methods to the workplace in the interest of improving productivity and the quality of work life. Many serve as human resources specialists, helping organizations with staffing, training, and employee

development. And 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 new 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 over the past 30 years, neuropsychologists are working with health 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 analysis; 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 mental retardation, and those with developmental disabilities caused by such conditions as cerebral palsy, epilepsy, and autism. They help clients adapt to their situation, frequently working 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 work directly with public and private schools. 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—suggests ways to change them. Social psychologists are found in a variety of settings, from academic institutions (where they teach and conduct research), and 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).

Sports 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 and more competitive and attract younger children than ever.

This information was provided by the American Psychological Association, whose Web site contains a wealth of information for students about the study of Psychology. Please [visit their Web site.](#)