



Forensic Psychology

Introduction and Overview

CHAPTER OBJECTIVES

- Define forensic psychology.
- Review career areas in the forensic sciences.
- Distinguish forensic psychology from forensic psychiatry.
- Identify and describe the major subareas of forensic psychology.
- Review the educational, training, and certification requirements necessary to become a forensic psychologist.

When the space shuttle *Columbia* disintegrated upon reentry into the Earth's atmosphere on February 1, 2003, “forensic investigators” from various federal agencies were immediately sent to the crash sites in an effort to identify the causes of the accident. They were forensic scientists trained to uncover evidence that may or may not eventually end up in a court of law. The term *forensic* thus refers to anything pertaining or potentially pertaining to law, both civil and criminal. Forensic investigations were undertaken after *Columbia*'s disintegration in the event that human factors—for example, terrorism, sabotage, or negligence—might have caused the tragedy.

Investigations of this sort almost invariably occur whenever there are unexpected and unexplained events that are not obvious natural disasters.

Forensic science has become an all-encompassing professional activity and a popular career choice among students. Nearly every conceivable profession, including psychology, has a forensic specialization. Many people are confused about the various “forensic” areas and assume that professionals within these fields do largely the same thing. It will become clear, however, that they do not. Although **forensic psychology** is the exclusive subject of this text, it is helpful to begin with illustrations of other forensic sciences for comparison purposes. In other words, it is important for readers to know at the outset what forensic psychology is *not*.

The Forensic Sciences

Examples of the forensic professions, in addition to forensic psychology, include forensic engineering, forensic linguistics, forensic medicine, forensic computer investigation, forensic pathology, forensic anthropology, forensic archaeology, **forensic psychiatry**, forensic social work, and forensic accounting. The focus of each discipline is evident from the terms. Forensic linguistics, for example, is concerned with the in-depth evaluation of language-related characteristics of text, such as grammar, syntax, spelling, vocabulary, and phraseology, either to profile an offender or to determine whether specific writing samples are from the same author (H. C. Black, 1990). Forensic anthropology refers to the identification of skeletal, badly decomposed, or otherwise unidentified human remains using the science of physical anthropology. Forensic pathology is that branch of medicine concerned with diseases and disorders of the body that relate to questions that might come before the court. The forensic pathologist—popularized in television shows such as *CSI* and in the novels of Patricia Cornwell—examines the bodies of crime victims for clues about the victims’ demise. Forensic anthropologists and forensic pathologists often work in conjunction with homicide investigators to identify a decedent; discover evidence of foul play; and help establish the age, sex, height, ancestry, and other unique features of a decedent from skeletal remains.

Forensic laboratories are usually maintained or sponsored by governmental agencies specifically to examine physical evidence in criminal and civil matters (see In Focus Box 1.1). The scientists working in these laboratories are expected to prepare reports and provide courtroom testimony on the physical evidence, if needed. Alternately, private laboratories provide services to governmental agencies on a contractual basis.

Scientists from both public and private laboratories may be asked to examine and testify about latent fingerprints, hair fibers, firearms and ballistics, explosives and fire debris, toxic material, and other pertinent evidence found at or near a crime scene or tragic accident. Some forensic labs are better at investigating certain types of evidence than others. For example, the U.S. Fish and Wildlife Services Forensic Laboratory is often summoned to help law enforcement officers investigate possible law violations when evidence includes animal parts or carcasses. The Food and Drug Administration (FDA) Forensic Center in Cincinnati is better equipped for, and experienced in,

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ultratrace elemental analysis (Stehlin, 1995). The lab's chemists can find contaminants in microscopic amounts, such as parts per trillion.

The FDA lab was instrumental in investigating a major product-tampering case that occurred in the United States in 1982. Seven persons in the Chicago area collapsed and died soon after taking Tylenol capsules. The capsules had been purchased in six different stores, and victims included a 12-year-old girl, a woman who had just returned from the hospital after giving birth, and three members of one family. Chemical investigation revealed that the capsules had been laced with cyanide. FDA chemists developed fingerprinting-like techniques that allowed authorities to trace the cyanide back to the specific manufacturer and distributor (Stehlin, 1995). The cyanide compound was identified as potassium cyanide with a purity of 90%. The compound is usually used in industries involved in metal electroplating, metal extraction, and both photographic and cinematographic film processing. Unfortunately, despite the fact that the poison was identified and the source was traced, the perpetrator was never found.

A wave of similar product tamperings took place soon after the Tylenol incident, involving Lipton's Cup-a-Soup (1986), Excedrin (1986), Tylenol (again in 1986), Sudafed (1991), and Goody's Headache Powder (1992). Cyanide was also discovered in grapes from Chile in 1989. The FDA lab continues to apply the "fingerprinting" techniques to identify the cyanide origins, and since 1980, FDA chemists have developed techniques to screen for more than 250 of the most toxic poisons commonly available to the public (Stehlin, 1995).

Since the increased threat of terrorism in recent years and events such as the anthrax scare that followed the September 11, 2001, terrorist attacks in New York and Washington, D.C., quick forensic chemical detection methods such as those described above have become especially critical. Also critical, though, are forensic techniques that can address more common crimes, such as drug trafficking, computer crimes, and a wide variety of white-collar offenses that involve fraudulent documents. We highlight a few of these techniques below.

Example of Forensic Science: Forensic Entomology

Forensic laboratories often employ scientists who specialize in **forensic entomology**, which is the study of insects (and their arthropod relatives) as it relates to legal issues. This specialty is becoming increasingly important in criminal and civil investigations. For example, entomological investigations of termite infestation may be used to support civil litigation dealing with real estate, pest control, or landlord-tenant disputes. In another context, forensic entomology may be useful in investigations of food contamination. Scientists try to determine where an infestation occurred (e.g., which factory or store), when it occurred, and whether it was accidental or the possible result of human tampering. (Whether there actually was negligence or evil intent, though, is left to the courts to decide.)

In criminal investigations, forensic entomology is used to determine the time since death (postmortem interval), the location of the death, placement or movement of the body, and manner of death. For example, because insects will feed first on

soft-tissue areas of the head, such as the eyes and nasal passages, and any open wounds, they often will neglect undamaged flesh that will be left intact to harden. Consequently, the feeding patterns of insects often provide invaluable clues about the nature of the death.

Forensic entomology can also be applied to investigations of drug trafficking. Insects are sometimes found in drugs, and the identity of these insects can help in pinpointing where the drugs were produced or packed. In some cases, forensic entomologists can establish from the DNA of body or head lice whether two individuals had contact with each other (Mumcuoglu, Gallili, Reshef, Brauner, & Grant, 2004). Forensic entomology can also help in determining whether parents or caregivers have abused their children by using wasps or bees to sting them as a form of punishment. Fortunately, these instances are rare.

Another Example: Questioned Documents

Still another science represented in forensic laboratories is forensic document examination. This science analyzes handwriting, print fonts, the authenticity of signatures, alterations in documents, charred or water-damaged paper, the significance of inks and papers, photocopying processes, writing instruments, sequence of writing, and other elements of a document to establish authorship and authenticity. The process is often called **questioned document examination or analysis**. The questioned document may be a check, a threatening letter, a hold-up note, a credit application or receipt, a will, an investment record, a tax form, or a medical record (R. Morris, 2000). Questioned document analysis can be applied to many types of investigations, including fraud, homicide, suicide, sexual offenses, blackmail, bombings, and arson. Questioned handwriting analysis, for example, may include the forensic examination of a signature, handwritten letter, entries on a form, or even graffiti on a wall. A forensic document examiner (FDE) may be asked to examine and render opinions on the authorship of writing on building walls; recover engraved or obliterated writing on different types of surfaces; or determine the brand or model of typewriters or keyboards, printers, embossers, inks, and printing processes (R. Morris, 2000).

An intriguing example of forensic document examination can be found in the search for Jack the Ripper, the serial killer who brutally murdered five prostitutes in separate incidents in London's East End in 1888. The case was never solved, although many professional and amateur investigators have tried to identify the killer for years. Crime writer Patricia Cornwell (2002) has carried on an extensive investigation of the murders and has written a book based on her findings, *Portrait of a Killer: Jack the Ripper—Case Closed*. Cornwell believes that Jack the Ripper was Walter Sickert (1860–1942), a renowned impressionist painter who walked the East London streets during the same time period as Jack the Ripper.

Apparently, letters believed to have been written by the Ripper are kept in the Public Record Office in London. The British government gave Cornwell permission to view these letters and about 500 other letters claiming to be from the notorious serial killer. During her investigation, Cornwell was also able to obtain two pieces of Sickert's own stationery. Although extensive handwriting analysis has not proved successful—the

Ripper probably disguised his handwriting—a watermark and other characteristics of the paper were far more revealing. According to Cornwell, the stationery was on Gurney Ivory Laid and was produced exclusively by a small manufacturer for personal use. Typically during production, the sheets were guillotined to size and then folded into quires of 24 sheets. The sheets were then given a final “bim”—a distinguishing mark, because each bim is slightly different from the others. The match between the short-edge cuts on the four identified sheets (two from the Ripper and two from Sickert’s stationery) indicates they came from the same quire of paper. According to Cornwell, this evidence is the strongest so far to implicate Sickert as the infamous Ripper.

Closely related to forensic document analysis is forensic ink analysis, a little-known crime-fighting tool that is sometimes used to show that certain documents have been backdated or altered. Most of the ink analysis today is done by the U.S. Secret Service’s Forensic Services Division, “which maintains the world’s largest library of ink samples with more than 7,000 entries” (Maremont, 2003, p. A4). There is also a small group of private forensic experts who do ink analysis, primarily for medical malpractice suits, patent battles, or cases involving disputed wills. The ink analysis is especially effective in examining the ink of ballpoint pens, which contain a variety of different dyes and drying properties. Ink analysis played a role in the 1973 conviction of mass murderer Juan Corona, who brutally killed 25 migrant workers near Yuba City, California (Maremont, 2003). Usually, however, ink analysis is used in investigations of business fraud or, in rare cases, by the Internal Revenue Service for income tax cases.

Computer Evidence Recovery

Anyone who has experienced hard-drive failure can recall the momentary panic it engenders. Surprisingly, most “lost” data can actually be recovered. Furthermore, as embarrassed politicians, their staffs, and high-profile professionals have learned, e-mail messages do not inevitably disappear in cyberspace.

Computer evidence recovery, also called forensic data recovery, involves e-mail and Internet analysis, along with sophisticated hard-drive and diskette recovery techniques of orphaned, fragmented, and erased data. A computer evidence recovery specialist has the training to search, seize, and analyze magnetic media originating from a variety of operating systems pursuant to the execution of a search warrant or subpoena. Without specialized training, though, a law enforcement officer armed with a search warrant would not be advised to open computer files from the office of a person suspected of Internet fraud or one suspected of distributing child pornography. The major goal of the specialist or investigator is to recover the data without modifying the original media or the image of the media.

Katy Clark (2002) points out that “forensic data recovery is a field that is swiftly becoming an important, as well as lucrative, industry” (p. 36). Quoting Kevin Ripa, president of a forensic data recovery company in Canada, Clark writes, “Data recovery is a necessary and vital investigative tool. It is the wave of the future for lawyers” (p. 26). In divorce cases, for example, lawyers may subpoena spouses’ personal computers to obtain evidence of an extramarital affair or other malfeasance. Computer evidence recovery is used in a wide variety of investigations, such as financial fraud,

embezzlement, sexual harassment, child pornography, program vandalism, identity theft, document forgery, software piracy, narcotics trafficking, and money laundering. It was a key law enforcement technique in bringing to justice Robert Hanssen who, while he was an FBI agent, engaged in spying for the Soviet Union and Russia for over 15 years. The data evidence recovery process involves an analysis of the computer make and capacity, the computer's time and date settings, hard-drive partitions, data and operating system integrity, computer virus evaluation, files, and software. The analysis will also usually involve careful evaluation of "shadow data," which is the information that remains on a disk even after the data are ostensibly erased, damaged, or lost. Many people engaging in various forms of illegal activity think they are safe by making deletions or using software designed to cover their tracks, not realizing that a well-trained computer data recovery expert can access almost any information sent or received.

Forensic data recovery also may be a powerful tool to clear a person of wrongdoing. For example, Clark (2002) describes a case of a successful businessman living in an upscale neighborhood, happily married with two children, who was accused of accessing and distributing child pornography. One evening, police appeared at his door to execute a search warrant. They seized his computer, took him into custody, and charged him with distribution of child pornography, though he strongly denied the allegations. His attorney contacted a computer evidence recovery service, which was able to demonstrate that the pornography was stored in his computer on dates when the man wasn't even in town. Apparently, he had unknowingly downloaded a "Trojan Horse," enabling the computer cracker to have access to his computer. (A computer cracker is someone who maliciously breaks into computers for the purpose of damaging data or sending out viruses, whereas a hacker tries to get through holes in computer codes to prove a point or play a joke.) The computer specialist was able to prove that someone else had been storing the pornography on the individual's computer without his knowledge.

As is apparent from the above illustrations, forensic investigations usually require expertise in chemistry, biology, physics, and other sciences, including the science of computer technology. Although television, movies, and popular novels provide numerous graphic examples of forensic examinations of evidence, the extensive scientific preparation required to work in forensic laboratories is usually not emphasized. The scientists depicted typically have access to state-of-the-art equipment, and they are often glamorous or have complex emotional lives. Many students express a keen interest in the forensic sciences and seriously consider pursuing a career in the field without fully understanding what it is or what is required to reach their goal.

The field of forensic psychology requires a very different type of preparation and is significantly different in content, as we will now demonstrate.

Forensic Psychology: An Overview

Forensic psychology—like many specialties in psychology—is difficult to define precisely. As John Brigham (1999) writes, if you ask a group of psychologists who interact with the legal system in some capacity, "Are you a forensic psychologist?" many will say yes, some will say no, and a majority will probably admit they really do not know. Referring to his own testimony in court, Brigham notes that, when asked the question,

IN FOCUS 1.1 Activities of the 50 Largest Forensic Crime Labs

The 50 largest publicly funded forensic crime laboratories in the United States—which are geographically all across the country but not located in every state—employ more than 4,300 full-time employees. Many of the labs claim to be significantly underfunded and understaffed. A majority of the employees (56%) are employed as analyst/examiners, followed by technical support personnel (15%), managerial personnel (12%), and clerical support (8%). Most of the analysts/examiners are engaged in the analysis of controlled substances (39%), toxicology (22%), and latent

prints (11%). Listed below are the activities engaged in by most large forensic laboratories.

- Analysis of controlled substances
- Firearms/toolmark analysis
- Biology screening
- DNA analysis
- Latent prints analysis
- Trace analysis
- Crime scene analysis
- Toxicology
- Examination of questioned documents
- Investigation of computer crimes

Source: Hickman (2004).

his most accurate current response would be, “Well, it depends.” As Brigham points out, the professional literature on the subject adopts one of two prominent definitions. Some of the literature defines forensic psychology broadly as the *research* and *application* of psychological knowledge to the legal system, whereas some of it prefers a more narrow definition, limiting forensic psychology to the *application* and *practice* of psychology as it pertains to the legal system. We (Bartol & Bartol, 1987) offer the following definition: “We view forensic psychology broadly, as both (1) the research endeavor that examines aspects of human behavior directly related to the legal process . . . and (2) the professional practice of psychology within, or in consultation with, a legal system that embraces both civil and criminal law” (p. 3). Ronald Roesch (cited in Brigham, 1999) suggests a narrow definition: “Most psychologists define the area more narrowly to refer to clinical psychologists who are engaged in clinical practice within the legal system” (p. 279). This definition may be too restrictive because it seems to imply a specialty called “forensic *clinical* psychology.” Furthermore, it excludes—among others—clinicians who offer counseling services to inmates and perform other corrections-related tasks. The broad definition, on the other hand, includes not only clinicians (also called practitioners) but also social, developmental, counseling, cognitive, experimental, industrial-organizational, and school psychologists—some but not all of whom are clinicians. The common link is their contribution to the legal system and its many components. We recognize, however, that only a small proportion of their work may be relevant in this context.

In this text, we will continue to adopt a *broad* definition of forensic psychology but will focus primarily on forensic practice and what psychologists working in the field actually do. That is, we emphasize the professional *application* of psychological knowledge, concepts, and principles to civil and criminal justice systems. It should be

understood, however, that this application must be based on solid research; thus, the research prong of our original definition (Bartol & Bartol, 1987) has not disappeared. The practice of forensic psychology, as it will be treated here, includes investigations, studies, evaluations, advice to attorneys, advisory opinions, and depositions or testimony to assist in the resolution of disputes relating to life or property in cases before the courts or other lawful tribunals. It can—and does—encompass situations before they reach the court as well as those situations following the court decision. It includes activities as varied as the following: courtroom testimony, child custody evaluations, screening and selection of law enforcement candidates, and clinical services to offenders and staff in correctional facilities. It also includes research and theory building in criminology; the design and implementation of intervention, prevention, and treatment for youth offenders; and counseling of victims of crime.

Over the past 25 years, forensic psychology has grown rapidly. As noted by Tucillo, DeFilippis, Denny, and Dsurney (2002),

A growing number of clinicians provide expert witness testimony addressing a variety of issues, such as competency to stand trial, criminal responsibility, child custody, personal injury or handicap, and suitability to work in law enforcement. In addition to this major trend in clinical psychology and neuropsychology, developmental and experimental psychologists have come into demand for their expert opinions on such matters as the reliability of eyewitness testimony and lie detection. (p. 377)

This growth is also reflected in the development of professional organizations devoted to research and practice in the field, significant increases in the number of books and periodicals focusing on the topic, and the establishment of standards for practitioners working in the discipline (Otto & Heilbrun, 2002). (See In Focus Box 1.2 for important historical benchmarks in forensic psychology.)

For our purposes, forensic psychology will be divided into five subspecialties: (1) police psychology, (2) psychology of crime and delinquency, (3) victimology and victim services, (4) legal psychology, and (5) correctional psychology. Police psychology and correctional psychology tend to be the more *applied* branches of forensic psychology, whereas the psychology of crime and delinquency and legal psychology tend to be more *research* focused. It should be noted, though, that each one has both research and applied aspects. Furthermore, psychologists conducting research in one area of forensic psychology may consult with or train practitioners in other areas. Likewise, the clinical experience of applied psychologists helps to inform theory development and suggest hypotheses to research psychologists. Finally, many practitioners do engage in research, although a very common complaint among them is the lack of time and resources for doing that.

Specific examples of some of the things that forensic psychologists (depending on their specialty) may be asked to do include the following:

Police Psychology

- Assist police departments in determining optimal shift schedules for their employees
- Assist police in developing psychological profiles of serial offenders

IN FOCUS 1.2 Historical Benchmarks in Forensic Psychology

- 1893**—First psychological experiment on the psychology of testimony, conducted by J. McKeen Cattell of Columbia University
- 1903**—Louis William Stern of Germany established a periodical dealing with the psychology of testimony (*Betrage zur Psychologie der Aussage*).
- 1908**—Publication of Hugo Münsterberg's *On the Witness Stand*, arguably one of the first professional books on forensic psychology. The book launched Münsterberg's career in forensic psychology, and some scholars consider Münsterberg, a Harvard professor of psychology, the father of forensic psychology.
- 1911**—J. Varendonck was one of the earliest psychologists to testify in a criminal trial, held in Belgium.
- 1913**—First time that psychological services were offered within a U.S. correctional facility (a women's reformatory in the state of New York)
- 1917**—William Marston developed the first modern polygraph.
- 1917**—Louis Terman was the first American psychologist to use psychological tests in the screening of law enforcement personnel.
- 1918**—First inmate classification system developed by psychologists was established by the New Jersey Department of Corrections. New Jersey also became the first state to hire full-time correctional psychologists on a regular basis.
- 1921**—First time an American psychologist testified in a courtroom as an expert witness (*State v. Driver*, 1921)
- 1922**—Karl Marbe, a psychology professor at the University of Würzburg, Germany, became the first psychologist to testify at a civil trial.
- 1922**—Psychologist-lawyer William Marston became the first to receive a faculty appointment in forensic psychology, an appointment as "professor of legal psychology" at American University in Washington, D.C. Marston also conducted the first empirical research on the jury system.
- 1931**—Howard Burt's *Legal Psychology* was published—the first textbook in the forensic area written by a psychologist.
- 1961**—Hans Toch edited one of the first texts on the psychology of crime, *Legal and Criminal Psychology*.
- 1964**—Hans J. Eysenck formulated the first comprehensive and testable theory on criminal behavior advanced by a psychologist and published it in the book *Crime and Personality*.
- 1968**—Martin Reiser became the first full-time police psychologist in the United States. He was hired by the Los Angeles Police Department and became instrumental in establishing police psychology as a profession.

- 1972**—Under the guidance and leadership of the American Association for Correctional Psychology (AACP), Stanley Brodsky, Robert Lewinson, and Asher Pacht, correctional psychology became recognized as a professional career.
- 1974**—The first successful interdisciplinary psychology and law program was developed at the University of Nebraska–Lincoln.
- 1978**—The American Board of Forensic Psychology began professional certification of diplomates in forensic psychology.
- 1991**—The American Academy of Forensic Psychology and the American Psychology Law Society published *The Specialty Guidelines for Forensic Psychologists*.
- 2001**—The American Psychological Association recognized forensic psychology as a specialty.

- Establish reliable and valid screening procedures for law enforcement officer positions at various police and sheriff departments
- Train police officers on how to deal with mentally ill citizens
- Provide counseling services to officers after a shooting incident

Psychology of Crime and Delinquency

- Evaluate the effectiveness of preschool intervention strategies designed to prevent violent behavior during adolescence
- Conduct research on the development of psychopathy
- Consult with legislators and governmental agencies as a research policy adviser on the prevention of stalking
- Consult with school personnel on identifying troubled youth who are potentially dangerous
- Develop a psychological test for assessing risk among the mentally ill

Victimology and Victim Services

- Evaluate and treat persons who are the victims of crime or witnesses of crime
- Conduct psychological assessments for personal injury matters having to do with such things as auto accidents, product liability, sexual harassment and discrimination, and medical negligence or workers' compensation
- Educate and train victim service providers on psychological reactions to criminal victimization, such as posttraumatic stress disorder
- Assess, support, and counsel those who provide death notification services
- Educate service providers on the impact of multiculturalism when victims seek mental health and support services

Legal Psychology

- Conduct child custody evaluations, visitation risk assessments, and child abuse evaluations
- Assist attorneys in jury selection through community surveys and other research methods

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- Perform evaluations of a defendant's competency to stand trial
- Consult with attorneys and the courts concerning custody decisions, conflict resolution, and the validity of assessment procedures used in the evaluation of various psychological conditions
- Conduct competency evaluations for the civil court

Correctional Psychology

- Establish reliable and valid screening procedures for correctional officer positions at correctional facilities
- Evaluate the effectiveness of a variety of existing programs (a process called program evaluation) for juvenile and adult offenders, such as victim–offender reconciliation programs, sex offender treatment, or health education programs
- Develop a stress management program for correctional personnel
- Assess the development of a system for classifying prison inmates for placement within a correctional facility

By this point in the chapter, the reader should be able to provide a number of additional examples. It should be noted, also, that the above list would be shortened considerably if we were to adopt a more narrow definition of forensic psychology.

The work settings in which forensic psychologists are found include, but are not limited to, the following:

- Private practice
- Family courts, drug courts, and mental health courts
- Child protection agencies
- Victim services
- Domestic violence courts and programs
- Forensic mental health units (governmental or private)
- Sex offender treatment programs
- Correctional institutions (including research programs)
- Law enforcement agencies (federal, state, or local)
- Research organizations (governmental or private)
- Colleges and universities (teaching and/or research)
- Juvenile delinquency treatment programs
- Legal advocacy centers (e.g., for the mentally ill and developmentally disabled)

Forensic Psychology Compared to Forensic Psychiatry

Psychologists, especially clinical, counseling, and forensic psychologists, are often confused with psychiatrists by the public and the media. Today, the lines of separation between the two professions are becoming increasingly blurred. Clinical, counseling, and some forensic psychologists, along with psychiatrists, are trained to provide direct treatment services to persons with emotional, cognitive, or behavioral problems. Psychiatrists are medical doctors (MDs) (or, in some cases, doctors of osteopathy [DOs]) who specialize in the prevention, diagnosis, and treatment of mental, addictive, and emotional disorders. Psychologists do not hold a medical degree, although some may have earned related degrees, such as a master's of public health (MPH).

Another major distinction between the two has been the license to prescribe drugs, including psychoactive drugs. Traditionally, psychologists have not been permitted by law to prescribe any medication. Now, even that distinction is beginning to disappear. On March 6, 2002, New Mexico became the first state in the United States to allow properly trained psychologists to prescribe psychoactive drugs, or drugs intended to treat mental disorders. On May 6, 2004, Louisiana became the second state in the country to pass a law authorizing properly trained psychologists to prescribe certain medications for the treatment of mental health disorders. At this writing, it appears Hawaii has made significant strides in enacting similar legislation, and prescription legislation has been introduced recently in Georgia, Connecticut, Missouri, and Tennessee. Psychologists in Guam gained prescription privileges in 1999.

Many psychiatrists, like psychologists, work in a variety of forensic settings, including the court, correctional facilities, and law enforcement. Psychiatrists who are closely associated with the law are often referred to as forensic psychiatrists. In some areas, such as issues relating to insanity determination by the courts, psychiatrists are more visible—and sometimes more preferred—than psychologists. As we will discuss in a later chapter, this reflects a greater comfort on the part of some judges with the medical model approach to mental disorder (Melton, Petrila, Poythress, & Slobogin, 1997). Psychologists and psychiatrists seem to be equally involved in pretrial assessments of juveniles and custody evaluations, while psychologists are more likely than psychiatrists to consult with law enforcement and offer treatment in the correctional system. Law-related research tends to be the bailiwick of psychologists, although some psychiatrists are engaged in conducting and publishing such research as well.

Careers in Psychology

Since the 1970s, there has been an enormous expansion of the profession of psychology in general (Reed, Levant, Stout, Murphy, & Phelps, 2001). Psychology encompasses a wide spectrum of topics ranging from engineering designs (human factors) to animal behavior and has a place in every imaginable setting. Psychologists can be found in “personnel selection and training, developing user-friendly computer software, the delivery of psychological services to victims of natural and man-made disasters, the profiling of serial killers, the creation of effective commercials that increase the sale of a product, and so on” (Ballie, 2001, p. 25). Currently, there are 148,000 members of the **American Psychological Association (APA)** (www.apa.org) alone. The APA, based in Washington, D.C., is the largest association of psychologists worldwide. Another 18,000 psychologists from the United States and abroad whose specialties span the entire spectrum of scientific, applied, and teaching specializations are members of the **Association for Psychological Science (APS)** (www.psychologicalscience.org), the second-largest psychological organization in the United States. The APS, also based in Washington, D.C., is a nonprofit organization dedicated to the advancement of scientific psychology. It is estimated that there are at least 300,000 practicing psychologists worldwide who provide a wide range of services (Donn, Routh, & Lunt, 2000; Lunt & Poortinga, 1996). In addition to the APA and APS, psychologists belong to many other professional organizations at the national, state, and local levels.

Education and Training

About 75,000 undergraduate psychology majors graduate each year from the nation's colleges and universities (American Psychological Association, 2003d; B. Murray, 2002b). Starting salaries for graduates with a bachelor's degree range from \$18,000 to \$45,000, depending on the job type and location, with an average of approximately \$29,000. Psychology majors most often find employment in the areas of management, teaching, counseling, social work, and sales. As most psychology majors become quickly aware, the bachelor's degree does provide a basic foundation in the field of psychology, but it does not adequately prepare a person to be a professional psychologist. The minimum educational requirement for psychologists is the graduate degree. In addition, specialization in psychology usually begins at the graduate level, although many undergraduate programs offer concentrations in certain areas, such as social psychology, education psychology, or human development. Graduate programs in psychology most often offer graduate degrees in experimental, biopsychology, developmental, cognitive, clinical, counseling, school, and industrial/organizational psychology. The last four represent the more applied or practitioner's side of psychology. Most recently, as we will see shortly, forensic psychology has become a fifth applied branch in the field, although the other four applied sectors have historically made significant contributions to various forensic topics and settings.

Graduate Training: Master's Level

At the master's level, clinical, counseling, and school psychology attract the most students (B. Murray, 2002b). In some states, graduates of master's degree programs in psychology—with the appropriate clinical training—may be eligible for licensure as psychological associates (LPAs) or master's level psychologists (MacKain, Tedeschi, Durham, & Goldman, 2002). In other states, graduates with master's degrees in psychology are not allowed to practice *psychology* (at least not use the label) and are instead licensed with *nonpsychology* titles, such as licensed mental health counselor, marriage and family therapist, or psychotherapist (MacKain et al., 2002).

In a survey conducted in North Carolina, Sally Joy MacKain and her associates (2002) asked state and private employers if they employed LPAs. Through this method, they were able to identify 345 master's-level psychologists working within the state. The researchers discovered that 158 were employed at mental health centers, 108 were with the state department of corrections, 54 were working at residential centers that serve the developmentally disabled, and 25 were employed at state psychiatric hospitals. Employers indicated that LPAs were as marketable as other master's-trained clinicians, such as social workers and counselors. A total of 18% of the employers stated they were more likely to hire psychologists than other master's-trained clinicians, and 49% said they were "just as likely to hire them." In fact, some employers reported difficulty in finding enough LPAs for their positions. Salaries for LPAs ranged from \$27,000 to \$45,000 with a median of \$30,500, a range similar to that of other master's-level clinicians.

In addition to employers, MacKain et al. (2002) also surveyed 60 LPAs. More than half the graduates interviewed (54%) stated they were definitely planning or were considering entering a doctoral program within the next 5 years, suggesting that the

opportunities presented by the LPA alone may be limited. Of the LPAs, 36% were employed in community mental health centers, 24% were working in state corrections or the courts, 16% were involved in private inpatient or outpatient facilities, 10% were in university or college settings, and 8% were in nonprivate agencies. Currently, there is no accreditation of master's programs in psychology through the APA. However, since 1995, applied master's programs have been able to seek accreditation from the Master's Accreditation Council (MPAC) (Hays-Thomas, 2000). Approximately 14,500 master's degrees in psychology are awarded each year (American Psychological Association, 2003d).

Graduate Training: Doctoral Level

At the doctoral level, clinical psychology attracts the largest number of students of all the applied specialties and is considered the entry-level credential for the independent practice of psychology (American Psychological Association, 1978; Hays-Thomas, 2000). Every year, approximately 1,200 students earn PhDs and another 700 students earn PsyDs in clinical psychology (B. Murray, 2002a). The PhD degree (Doctor of Philosophy) requires a dissertation and is well accepted in the academic world as appropriate preparation for scientists and scholars in many fields across the globe (Donn et al., 2000). It is regarded primarily as a researched-based degree. A dissertation refers to a substantial paper based on the PhD candidate's original research, which should make a significant contribution to the research literature. The PsyD (Doctorate in Psychology) is a graduate degree designed primarily for students who wish to become practitioners rather than researchers. The first PsyD program was established in 1968 by Donald R. Peterson at the University of Illinois (Peterson, 1968). Although many PhD psychologists have questioned the soundness of the PsyD since its early beginnings, especially in view of its limited research focus, the degree has received increasing professional recognition in recent years and has attracted the interest of many students. More than 50 institutions have awarded a total of 9,000 PsyDs during the past 30 years. Overall, approximately 4,300 doctoral degrees in psychology are awarded each year (American Psychological Association, 2003d).

Usually, salaries for those with the doctorate are highest in the private sector and lowest for those in academia (college or university teaching and research). Those working for government fall somewhere in between.

Licensure

By 1977, every state in the United States required a license to practice psychology, and all Canadian provinces regulated the practice in 1990 (Tucillo et al., 2002). In 1987, in an effort to encourage standardized licensing requirements, the APA developed the Model Act for State Licensure of Psychologists (see American Psychological Association, 1987) to serve as a prototype for drafting state legislation (Tucillo et al., 2002). One of the chief criteria to qualify for licensing is possession of the doctoral degree. Professional psychologists are also ethically obligated to comply with the standards pertaining to their practice, as outlined by the **Ethical Principles of Psychologists and Code of Conduct—2002** (American Psychological Association, 2003a). Guidelines

are also offered in a number of areas associated with research and clinical practice. A good example is the **Specialty Guidelines for Forensic Psychologists** (Committee on Ethical Guidelines for Forensic Psychologists, 1991). Among other things, the “Specialty Guidelines” assert that “forensic psychologists are responsible for a fundamental and reasonable level of knowledge and understanding of the legal and professional standards that govern their participation as experts in legal proceedings” (p. 658). An important distinction between standards and guidelines should be noted. Psychologists are expected to comply with standards, and there is an enforcement mechanism in place in case they do not. For example, an alleged violation in the *code of ethics* may result in a complaint to the APA’s Professional Conduct Board and, ultimately, loss of one’s license to practice psychology. Loss of license is rare, but some common sanctions include temporary license suspensions, probationary periods, or supervision by another psychologist. In contrast to standards, *guidelines* are aspirational; psychologists are strongly encouraged—but not required—to abide by them.

Employment

The most recent survey on where psychologists with new doctorates find employment indicates that about three-fourths are employed in higher education or human service settings (such as schools or hospitals) (D. Smith, 2002c). The rest work in business, government, or private practice. About 25% of those with new doctorates find employment in academic positions at 4-year colleges and universities. Most of the graduates have a strong foundation in research methodology and analysis that allows them to work in a variety of occupations. “Rather than being stereotyped as a professor or therapist, more and more psychologists are being seen as applied scientists” (Ballie, 2001, p. 25).

The Applied Specialties

Although the subspecialties of applied psychology may have distinct features, journals, associations, and interests, they also have many things in common. The similarities between counseling psychology and clinical psychology, in particular, are far greater than the differences. The clinical psychologist typically experiences 9 or 12 months of supervised internship in a clinical setting, where the theories and methods acquired in graduate training can be applied to human behavior problems. The counseling psychologist receives much the same training as the clinical psychologist, including the internship. In the past, the major distinction between the two was their focus. The **counseling psychologist** was trained to evaluate and treat (counsel) persons with adjustment problems, such as those relating to education, job, and personal and marital relationships. The **clinical psychologist** was trained to evaluate and treat persons suffering from more serious behavior and mental problems found in mental hospitals or psychiatric clinics. This distinction is rapidly becoming blurred, however.

Both counseling and clinical psychologists are employed in a wide assortment of settings, including college and university counseling centers, university research and teaching positions, independent practice, health care settings, hospitals, and the legal-forensic system. About 40% of the doctoral-level practitioners are in private or

independent practice (Reed et al., 2001). Both counseling and clinical psychologists (at the doctoral level) are licensed in all 50 states, usually under the same designation of "licensed practicing psychologist."

In clinical and counseling practice throughout the United States, psychologists are finding that their clients are often from cultural backgrounds different from their own. "The majority of service providers are European Americans with middle-class values and orientation; a sizeable portion of the diverse client populations are African-Americans and underserved with mixed values and orientations" (E. F. Morris, 2001, p. 563). A growing black middle and upper class contribute to the diversity. In addition, psychologists are encountering in their practices more persons of Latino, Asian, Native American, and Middle Eastern heritage. It is extremely crucial for practicing psychologists to be knowledgeable about and sensitive to the cultural values and norms held by persons to whom they are providing service. This may be especially important for forensic psychologists, who are often not chosen by those they evaluate or treat but nevertheless are called on to assist in making decisions that may drastically affect the lives of these individuals.

Clinical and counseling psychologists who are service providers to diverse populations should at a minimum be aware of their own assumptions and biases regarding cultures that are different from their own, understand their clients' worldviews, and use only culturally appropriate interventions and techniques (Erickson & Al-Timini, 2001; Sue, Arredondo, & McDavis, 1992). It is interesting to note that only half of the doctoral-level clinicians in one survey felt competent to provide services to African Americans despite their training exposure and diverse clientele (Allison, Crawford, Echemendia, Robinson, & Kemp, 1994; E. F. Morris, 2001).

The APA (1993) has taken notice of this important issue by publishing its "Guidelines for Providers of Psychological Services to Ethnic, Linguistic, and Culturally Diverse Populations." The guidelines emphasize, for example, that psychologists "consider the validity of a given instrument or procedure and interpret resulting data, keeping in mind the cultural and linguistic characteristics of the person being assessed" (p. 46). In addition, the guidelines further recommend that "psychologists who do not possess knowledge or training about an ethnic group seek consultation with, and/or make referrals to, appropriate experts as necessary" (p. 46). It should also be recognized by forensic psychologists that the legal system they are working with might be unprepared to deal with many complex issues not only of culture, ethnicity, and race but also of sexual orientation. Same-sex marriages or unions, adoptions by gay and lesbian couples, custody evaluations when one party seeking custody is gay or lesbian, and same-sex domestic violence are examples.

School psychology is a specialty involved in the evaluation, diagnosis, and reduction of social, emotional, and cognitive problems of school-age children. In many ways, the tasks of school psychologists are very similar to those of child clinical psychologists, but school psychologists tend to be more focused on the school environment and its influences on the child. They work not only with children with problems but also with parents, teachers, and school administrators. Many school psychologists do not have the PhD or other doctorate degree, but many states provide certification

and licensing for school psychologists who have the requisite master's degree and an internship within a school setting. Currently, there is a major shortage of qualified school psychologists nationwide (Dittmann, 2002). Compounding this shortage is the fact that approximately 45% of the students in public schools are from racial or ethnic minorities, often with very different linguistic experiences (Sue, Bingham, Porché-Burke, & Vasquez, 1999). As we will see shortly, school psychologists are increasingly becoming involved in forensic settings.

Industrial/organizational (I/O) psychology is a branch in which psychologists help develop strategies that build better organizations and improve the well-being of employees. They work in a variety of areas within the organization, including selection and placement, training and development, organizational development and change, performance measurement and evaluation, quality of work life, consumer psychology, and human factors. The I/O psychologist may assist in fashioning accommodations for the disabled, offer employee workshops on sexual harassment, or counsel employees who have experienced workplace victimization. The training for this specialty usually involves a heavy emphasis on research design, statistics, knowledge of the research literature as it relates to organizations, and a 1-year internship within a relevant organization.

Forensic Psychology as a New Specialty

In August 2001, the Council of Representatives of the American Psychological Association voted to recognize forensic psychology as another specialty. Although this is an important step forward, recall that other specialties also provide services in forensic settings. It remains too early to tell whether these psychologists will change their affiliations or will identify with more than one specialty. It should be noted that the council adopted a narrow rather than broad definition of forensic psychology. "It was ultimately decided that the petition for specialization should define forensic psychology narrowly, to include the primarily clinical aspects of forensic assessment, treatment, and consultation" (Otto & Heilbrun, 2002, p. 8). At this point, it is not clear whether the new specialty embraces the wide variety of settings discussed in this text. Although we follow the direction of the petition by focusing primarily on the clinical aspect of forensic psychology, we also interpret *clinical* broadly. It includes services provided across the five areas outlined earlier in the chapter: police psychology, psychology of crime and delinquency, victimology and victim services, legal psychology, and correctional psychology.

Educational and Training Requirements in Forensic Psychology

The growth in the field is demonstrated by the recent development of several graduate programs in forensic psychology (at both the master's and doctoral levels) throughout the world, particularly in Canada, the United States, the United Kingdom, and Australia. There has also been considerable growth in *training* opportunities in forensic psychology at the predoctoral, internship, and postdoctoral levels (Otto & Heilbrun, 2002). In recent years, a discernible expansion has also occurred in the number of doctoral programs in clinical and counseling psychology that offer at least one or more courses, practica, or internships in forensic psychology. Many colleges

and universities offer courses in forensic psychology, legal psychology, or psychology and law at the undergraduate level.

Most of the graduate programs in the United States concentrate on either clinical or counseling psychology as it relates to corrections or on social psychology as it relates to legal psychology or psychology and law. Some universities offer a combined JD (law degree) and PhD as part of the academic package, although, partly due to the academic rigor and time involved, the “package” has become less popular to students in recent years. Formal programs offering specific degrees in police psychology are virtually nonexistent in the United States and Canada, although there are several programs called “investigative psychology” in the United Kingdom. Canada leads the world in research in correctional psychology, and the curricula in Canadian forensic programs reflect this strong research or empirical attention.

Students graduating from any of the worldwide graduate programs are expected to be able to analyze, organize, apply, and transmit existing knowledge in the field of forensic psychology, broadly defined. We will return to the specific educational and training requirements for each of the five major areas in forensic psychology when we discuss the areas in more detail shortly.

Although there are few formal doctoral programs in the discipline, the American Board of Professional Psychology has awarded diplomate status in forensic psychology since the mid-1980s. A **diplomate** is a professional designation signifying that a person has been certified as having advanced knowledge, skills, and competence in a particular specialty. Diplomate certification in forensic psychology attests to the fact that an established organization of peers has examined and accepted the psychologist as being at the highest level of excellence in his or her field of forensic practice. The psychologist must be licensed to qualify for diplomate status.

Many other national and state certification boards have emerged during the past 10 years, including the American Board of Psychological Specialties (ABPS), which is affiliated with the American College and Board of Forensic Examiners. Criteria used by the various boards and organizations to grant credentials or titles vary widely (Otto & Heilbrun, 2002). Note that certification usually requires knowledge and competence in both the applied and research components of the discipline, but it is largely for those psychologists who provide services to the courts and possess doctorates in psychology. The American Academy of Forensic Psychology and the American Psychology Law Society published, in 1991, the *Specialty Guidelines for Forensic Psychologists* (SGFP) referred to earlier (Committee on Ethical Guidelines for Forensic Psychologists, 1991). “The primary goal of the SGFP is to improve the quality of forensic psychological services by providing guidance to psychologists delivering services to courts; members of the bar; litigants; and persons housed in forensic, delinquency, or correctional facilities” (Otto & Heilbrun, 2002, p. 7). We now turn to a discussion of the five major areas in the practice of forensic psychology to be covered throughout the text.

Police Psychology: An Overview

Police psychology is the application of psychological principles and clinical skills to law enforcement and public safety (Bartol, 1996). Like other subareas of forensic

psychology, it should be based on research knowledge. The term *police psychology* is somewhat imprecise because it appears to exclude other law enforcement agents, such as deputy sheriffs, fish and wildlife agents, airport security, marshals, constables, and many types of other state and federal agents. The term *law enforcement* is more encompassing. However, critics of that term note that enforcement of the law is only one of many tasks performed by police and that law is often enforced selectively. The real work of police is maintaining order, providing service, keeping the peace, or being coproducers—with citizens—of public safety. Rather than adopt one or the other viewpoint—each has its merits—we will use *police* and *law enforcement officers* interchangeably and broadly to include the wide variety of agents listed above.

The relationship between psychology and law enforcement has waxed and waned over the years, with considerable forensic psychology involvement followed by a period of quiet. Overall, though, as law enforcement agencies have become more professional, law enforcement supervisors and directors better educated, and the public more critical and concerned, there has been a substantial increase in the need for services provided by forensic or police psychologists. They perform preemployment psychological assessments, fitness-for-duty evaluations (FFDEs), special-unit evaluations, hostage team negotiations, and deadly force incident evaluations. Special-unit evaluations include the selection and training of special weapons and tactics teams (SWATs), tactical response teams (TRTs), and hostage negotiation teams (HNTs). Forensic psychologists are also increasingly asked to do investigative-type activities, such as criminal profiling, psychological autopsies, handwriting analysis, and eyewitness (or earwitness) hypnosis. Larger police departments usually hire full-time, in-house police psychologists, whereas the smaller departments usually use psychological consultants.

In a survey of 152 police psychologists (Bartol, 1996), 89% of the respondents said they had PhD degrees, followed by EdD degrees (4.5%), master's degrees (3.6%), and PsyD degrees (2.7%). Most of the PhDs had obtained their degrees in clinical psychology (60.7%), counseling (17%), or industrial/organizational psychology (8%). Twenty-five percent of the respondents were women. Participants in the nationwide survey were also asked to indicate the type of services they provided to police during a typical month, as well as the amount of time they usually spent at each activity. Respondents said that preemployment screening and assessment consumed the largest percentage (34.3%) of their time. A significant amount of time was also spent in providing services to officers and their families (28.7%), followed by fitness-for-duty evaluations (6.8%), training of personnel (6.9%), and administrative work (3.9%).

Currently, there are no formal graduate programs in the United States specifically focused on police psychology. It is best for students entering the field to earn a doctorate in psychology (especially clinical, counseling, or industrial/organizational) and, while in the graduate program, work with a faculty member who is involved in those areas and preferably has worked with the law enforcement community. It is also advisable to complete a doctoral or postdoctoral internship in an agency or organization that deals directly with police organizations. A few police departments (e.g., Los Angeles Police Department, the Los Angeles Sheriff's Department, the Metro-Dade Police Department in Florida, and the New York Police Department) do offer pre- or

posttraining in police psychology. More common are internships, which involve a formal schedule of supervision and training as well as an opportunity for some degree of police training, ranging from ride-alongs to attendance at a police academy. Regardless of the career path taken, it is critical that a person interested in police psychology become highly familiar with the nature of police work, its policies and procedures, and police culture as a whole. Some practitioners estimate that for police psychologists to be highly effective, the “police culture socialization process” may take up to 3 years beyond the usual academic and clinical training (Finn & Tomz, 1997). An aspiring police psychologist should also plan on being available 24 hours a day for the agency and be willing to work in different locations (e.g., on the street, at the academy, or in an officer’s home). It is not, however, necessary to become a police officer before accomplishing these goals; in fact, it may be a disadvantage. Many police officers would prefer to talk to someone outside of the agency, especially when it comes to confidentiality (Finn & Tomz, 1997).

Psychology of Crime and Delinquency

The psychology of crime and delinquency is the *science* of the behavioral and mental processes of the adult and juvenile offender (Bartol, 2002). It is primarily concerned with how criminal behavior is acquired, evoked, maintained, and modified. Recent research has focused on the offender’s cognitive versions of the world, especially his or her thoughts, beliefs, and values and how they can be understood and changed if necessary. It assumes that various criminal behaviors are acquired by daily living experiences, in accordance with the principles of learning, and are perceived, coded, processed, and stored in memory in a unique fashion for each individual.

Criminal psychology examines and evaluates prevention, intervention, and treatment strategies directed at reducing criminal behavior. Research in crime and delinquency has discovered, for example, that chronic violence usually develops when children do poorly in school, do not get along with peers, have abusive parents, and attend schools that do not control disruptive and violent behavior (Crawford, 2002). Research has also found that social rejection by peers and others can lead to serious, violent offending. “A great deal of psychological functioning is predicated on belonging to the group and enjoying the benefits, both direct and indirect, of that belongingness” (Benson, 2002, p. 25). When this sense of belongingness is removed or restricted, a feeling of isolation and social exclusion occurs that tends to produce significant changes in behavior, such as an increase in aggression, violence, and other maladaptive behaviors. Under these conditions, human behavior may become impulsive, chaotic, selfish, disorganized, and even destructive. School shooters, for example, frequently express a sense of social isolation and rejection (see discussion below).

Researchers have also found, however, that well-designed and carefully executed prevention programs can prevent violence and a lifelong career path of crime. For example, the Fast Track Prevention Program, developed by researchers at Duke University, Pennsylvania State University, Vanderbilt University, and the University of Washington, has shown highly promising results in reducing juvenile crime. We will discuss more such programs in the chapters on crime and delinquency. Of late, applied

psychologists working in school settings have found an increased need for their services, as we noted above. This has led to a keen interest in a new subdivision of school psychology.

Forensic School Psychology

Educational programs are required in correctional and psychiatric facilities for young people throughout the country, and some states have established special school districts within these facilities (Crespi, 1990). The challenges for forensic school psychologists within these contexts are considerable. Although the primary focus of public and private schools in the community is obviously education, education in most correctional or psychiatric settings is secondary to the reasons for confinement.

Rehabilitation of the juveniles—which includes but is not limited to education—is crucial. Consequently, assessment and counseling services are critical roles for the school psychologist within these settings. Although many forensic school psychologists primarily work with mentally disordered offenders and youth in correctional facilities, they also work with public and private schools on issues that potentially relate to the legal system.

Forensic school psychologists routinely interact with a multitude of legal issues: local school concerns about discharge; possible placement into residential school programs and its concomitant implications for the youngster's home school district; the limitations of client privilege; tactics during contested special education cases; and expectations of judges, attorneys, and facility staff pertaining to mental status and the client's legal commitment (Crespi, 1990, p. 84).

The need for additional consultation with school psychologists within the public and private school systems across the country took on chilling urgency in the late 1990s when a rash of school shootings made headlines. Communities across the nation that had previously had a low profile—West Paducah, Kentucky; Jonesboro, Arkansas; Pearl, Mississippi; Springfield, Oregon—suddenly became well known. The most striking case was the mass murder of 12 students and 1 teacher at Columbine High School in Littleton, Colorado, in April 1999. Twenty other students were injured, some seriously, during that incident. The two teenage boys who were responsible for the shootings apparently committed suicide in the school library during the tragedy. To the public and news media, the shooters appeared to be two ordinary boys from normal, middle-class families living in a suburb of Denver. As more information became public, the shooters were described as isolated teenagers fascinated by weapons and often ridiculed by other students. Although there had been a number of school shootings prior to Columbine (there had been at least 10 school shootings between 1996 and 1999), the Columbine shootings prompted a great deal of alarm and concern from parents across the United States. In addition, the media and some experts were quick to generalize about the “skyrocketing school violence problem” and demanded some kind of threat or risk assessment to identify those youth who might have similar intentions. Therefore, risk assessments became more common. Such an assessment would occur, for example, when a student has made a spoken or written threat to harm classmates or teachers. Once a youth has been assessed, he or she may

then be counseled in the school setting or in the community or may even be expelled from school. That assessment task often falls to the school psychologist.

Despite the media attention directed to Columbine and the other school tragedies, it is important to keep school violence in perspective. The school shootings described occurred during a time when juvenile violent crime was decreasing nationwide. Whenever the news media highlight certain events and dramatize their significance, the events seem to be more widespread and frequent to people than they really are. This phenomenon is called the **availability heuristic**. In reality, although the shootings were terrible and tragic, they were not representative of the juvenile crime picture as a whole. Furthermore, although the media understandably report incidents of children having guns on school premises and we periodically learn of still another instance, there is no documentation that this is a widespread problem. Although it is important to be alert for possible dangers facing school-age children and the adults who work with them in the schools, the reality is that the risk of victimization in the school environment is smaller than in private homes or the community at large (O'Toole, 2000). Some schools, of course, are more dangerous than others, and any risk is still unacceptable. (We should note that the Virginia Tech killings in 2007 are not considered school shootings in the same sense as those mentioned here. Colleges and universities have larger, more open campuses, and the perpetrator in the Virginia case was not a juvenile. We discuss the case in more detail later in the book.)

Unfortunately, at present, there are very few formal training programs specializing in **forensic school psychology**. However, with the continual increase of youth confined in correctional facilities across the country who are in need of education and the push to make our schools a safer place, this discipline would seem to have a very promising future.

Victimology and Victim Services

Victimology refers to the study of persons who have experienced either actual or threatened physical, psychological, social, or financial harm as a result of the commission or attempted commission of crime against them. The harm may be direct or primary (against those who experience it and its consequences firsthand), or indirect or secondary (against family members, relatives, survivors, or friends who experience the harm because of their closeness to the victim) (Karmen, 2001).

Violent victimization of children, such as terrifying abductions, school shootings, and sexual attacks, can disrupt the course of child development in very fundamental ways and can be associated with emotional and cognitive problems over the course of the life span (Boney-McCoy & Finkelhor, 1995). In adults, there is strong evidence that the effects of criminal victimization—such as assault, robbery, and burglary—are both pervasive and persistent (Norris & Kaniasty, 1994). Until recently, psychological services were received by a very small fraction of crime victims (2%–7%) (Norris, Kaniasty, & Scheer, 1990). In fact, it has only been within the past 30 years that criminal victimology has become recognized as a scientific and professional field of study (Karmen, 2001). Increasingly, forensic psychologists are beginning to play major roles in the research,

evaluation, and treatment of crime victims from diverse cultural contexts and age groups. These activities will be covered in greater depth in Chapters 10, 11, and 12.

Students wishing to pursue a research career in victimology probably should obtain a research doctorate in psychology, criminal justice, social work, or sociology. Those desiring careers as practitioners in the field would be advised to obtain a PhD in clinical or counseling psychology or an MSW (master of social work) degree. There are other training opportunities and career paths, however.

Over the past 25 years, for example, the field of victim services has become a rapidly growing profession, and not all of these services relate to crime victims. Today, there is greater understanding of victims' issues due to legislation enacted to support victims' rights, increased funding for victim services, the efforts of victim advocates, and active research in victimology. In particular, victim services concentrating on victims of sexual assault; domestic violence; and partner, child, and elder abuse have noticeably grown in recent years. More recent legislation will certainly broaden the scope of understanding and services for victims across a wide spectrum. Examples of this recent legislation are the Victims of Trafficking and Violence Prevention Act of 2000 and the USA Patriot Act of 2001, which—among its least controversial provisions—addresses the needs and concerns of victims of terrorist acts. Recently, the APA has established a national network of psychologists with training in disaster response who offer volunteer services to relief workers and victims of human-made or natural disasters. It is called the Disaster Response Network (DRN).

A small number of community colleges and universities are beginning to offer specific training designed for victim service providers. Beginning in 1989, the California State University–Fresno (CSUF) offered the first Victim Services Institute with Victims' Services Certification to graduates of the institute. The program became so popular that the university, in 1991, developed the first victimology major (BA) and, by 1992, the first graduate concentration in victimology (S. D. Walker & Kilpatrick, 2002). The University of New Haven (Connecticut) offers degree concentrations and certificate programs at both graduate (MS) and undergraduate (BS) levels. Other colleges or universities offering certification or degrees in crime victim or survivor services include Washburn University, Kansas City Community College, Red Rocks Community College, and Sam Houston State University. In the near future, other colleges and universities will likely be offering academic credit and degrees in this emerging area.

The National Victim Assistance Academy (NVAA), funded and sponsored by the U.S. Department of Justice's Office of Victims of Crime (OVC), has led the way in developing curriculum standards to be used at the national and state levels. The NVAA currently offers two distinct levels of training and education: (1) the Foundation Level Academy and (2) the Advanced Topic Series. The Foundation Level Academy, which began in 1995, is a comprehensive, 40-hour, academic-based course of study in victimology, victims' rights, and victim services for victim services professionals and allied professionals. The Advanced Topic Series are workshops consisting of 20 to 24 hours of academic-based training in selected concentrations, such as program management, specific training/education skills, and techniques.

Legal Psychology

Legal psychology is an umbrella term for the scientific study of a wide assortment of topics reflecting the close relationship between psychology and the courts. These topics include competencies and criminal responsibility (insanity defense), civil commitment, the psychology of the jury, the psychology of evidence, child custody determinations, family law issues, eyewitness identification, and the effects of pretrial publicity on jury decision making. As treated here, legal psychology includes both research and application of behavioral and social science to criminal and civil courts.

A caveat is in order, however. It is not unusual to see the terms *legal psychology*, *psychology and law*, and *forensic psychology* used interchangeably in academic and professional literature. Although we use *legal psychology* here as a subarea of forensic psychology, we recognize that this is not a universal approach. We also recognize the considerable overlap between legal psychology and the other subareas we have carved out. The psychology of evidence, for example, is of intense interest to police psychologists, who might be advising the law enforcement community on facial composites or the reliability of eyewitness testimony. The legal psychologist is far more likely than the police psychologist to be conducting research in these areas, however. Likewise, legal psychology and victimology intersect when psychologists perform risk assessments and some custody evaluations. The point here is to emphasize that the various subareas of forensic psychology are not mutually exclusive. (See In Focus Box 1.3 for an example of a specialization that may be valuable in several subareas of forensic psychology.)

One of the numerous topics holding considerable interest for legal psychologists is the psychology of false confessions. Most people are aware that suspects—for a wide variety of reasons—sometimes confess to crimes they did not commit. A suspect may be afraid, may want the notoriety attached to confessing, may desire to protect the real perpetrator, or simply may think that no one will believe in his or her innocence. What surprises many people, however, is the fact that some suspects who are truly innocent come to believe they are truly guilty. Current research strongly suggests that skillful manipulation by law enforcement officers can lead to such false confessions (Kassin, 1997; Kassin, Goldstein, & Savitsky, 2003; Kassin & Kiechel, 1996; Loftus, 2004). Loftus (2004) observes that “we have every reason to believe that some people who are presented with false evidence that they committed a crime might actually come to believe that they did” (p. i). Legal psychologists have been at the forefront of studying this bizarre phenomenon.

Another topic of interest to legal psychologists is the creation of facial composites from the memory of eyewitness. Composites are considered indispensable aids to criminal investigation by most police agencies. Composites are reconstructions of faces through memory, and they are built either with the help of an artist’s sketching skills or by using the various commercial kits available to law enforcement. In recent years, kits have been replaced by computer-based systems where features are stored on disks and the face is put together on a video display unit. Interestingly, however, research by forensic psychologists has revealed that computer systems are no more effective in developing accurate facial composites than kits or artists (Koehn & Fisher, 1997; Kovera, Penrod, Pappas, & Thill, 1997). So far, this research has consistently

IN FOCUS 1.3 Forensic Neuropsychology

The term **forensic neuropsychology** refers to the application of knowledge from the neuropsychological profession to legal matters. Neuropsychology is the study of the psychological effects of brain and neurological damage and dysfunction on human behavior. Clinical neuropsychology is the applied branch of the field that focuses on the assessment and diagnosis of the neurological damage. Forensic neuropsychologists provide information in legal cases on such things as dementia, brain damage, and intellectual functioning. The neuropsychologist may be asked to testify on the extent of a person's impairment and be expected to answer questions pertaining to employment fitness, the need for a guardian or health care provider, chances of full recovery, and/or the extent of rehabilitation. Over the past two decades, the predominant application of forensic neuropsychology has been directed at civil cases involving disability determination;

worker's compensation; personal injury cases; and the mental ability of a person to make financial, health, and general living decisions. Neuropsychology is also increasingly used in criminal cases, such as in the evaluation of a defendant's competency to stand trial or for determining whether an insanity defense could be supported.

Neuropsychological assessment procedures and tests include measures that evaluate general intelligence, language, memory, attention, thought processes, perceptual-motor functioning, and emotional status.

Forensic neuropsychology is a profession that is developing very rapidly and has a very bright and promising future. The best career route for a student interested in this field is to pursue a PhD in clinical psychology with a heavy emphasis on biopsychology and an internship focusing on clinical neuropsychology. Many neuropsychologists are certified by the American Board of Clinical Neuropsychology.

found that facial composites developed from the memory of eyewitnesses are poor models of the "real" face of the offender. However, facial composites may be helpful in narrowing the field of suspects and providing leads for law enforcement investigators. For example, a sketch of a bank robber, disseminated by the media, may sufficiently represent the true perpetrator that it leads to an acquaintance alerting police. Such sketches almost invariably produce many false leads, however.

Family Forensic Psychology

Forensic psychologists are becoming increasingly involved in family law, and family forensic psychologists are leading the way in dealing with the many new and emerging issues in this area. For example, the 2000 census indicates that there has been a baby boom in gay and lesbian families as well as a dramatic increase of cohabitating, single-parent, and grandparent-led families (Grossman & Okun, 2003). These changes affect family formation, maintenance, and dissolution, and they challenge traditional concepts of what a family is and how families function. Family courts are struggling with unprecedented issues such as visitation and custody rights of lesbian, gay, and cohabitating parents who split up; whether surrogate mothers or donors of eggs or sperm have any parental rights; and the implications of children who are doing well

living with a grandparent when a parent is released from jail and wants to reclaim these children (Grossman & Okun, 2003, p. 163).

In addition, family forensic psychologists are concerned with abuse; adoption; alternative families; child support; divorce, including custody, relocation, and conflict resolution; elder law, including estate planning; family business; guardianship; juvenile justice; paternity; reproductive and genetic technologies; and other areas such as termination of parental rights. Family forensic psychology is involved in civil and criminal cases when the understanding of family dynamics and family systems is essential, for example, in cases involving visitation to prisons, release programs, and impact of sentencing on family members (Grossman & Okun, 2003, p. 166).

The best-known areas of **family forensic psychology** involve child custody, family violence, and the assessment and treatment of juveniles, all topics that will be covered in some detail later in the book. We will describe the other newer topics as we encounter them throughout various sections of the text.

Correctional Psychology: An Overview

Correctional psychology is arguably the fastest-growing branch of forensic psychology. The number of persons incarcerated in the United States is now over 2.3 million and growing daily (Sabol, Hinton, & Harrison, 2007). Although only a portion (7–10%) of these individuals qualify as “chronic offenders,” it is estimated that each chronic offender costs society about \$1.3 million over the course of the offender’s lifetime (Crawford, 2002). In addition, more than 4 million persons are under correctional supervision in the community, such as on probation or parole. Clearly, there is a great need for the services of correctional psychologists. Correctional psychologists are sometimes distinguished from psychologists working in correctional facilities or with correctional populations in the community. The correctional psychologist typically has “specific academic and/or program training in correctional philosophy, systems, offender management, forensic report writing, treatment aimed at reducing recidivism, and outcome research” (Althouse, 2000, p. 436). Many—if not most—psychologists working in corrections do not have this specific background. Nevertheless, they offer valuable services to corrections. For our purposes, we will use the terms interchangeably.

In 1974, psychologist E. I. Megargee remarked, “By and large, psychology as a scientific discipline has not made a substantial contribution to the applied area of corrections” (p. 44). Correctional psychology has changed dramatically since the 1970s, however. In recent years, correctional and research psychologists have made substantial contributions to corrections, particularly pertaining to inmate classification systems, psychological assessments, program/treatment evaluation, crisis intervention strategies, and substance abuse treatment approaches.

As the number of opportunities in corrections has proliferated, psychologists have increasingly discovered that correctional psychology is an exciting, rewarding, and challenging field (L. Richardson, 2003). The **correctional psychologist’s** major goal is to help in inmate rehabilitation, treatment, and reintegration into the community. Direct inmate services may include crisis intervention, long-term and short-term

therapy, group therapy, and substance abuse treatment. Psychologists in these settings administer a wide variety of psychological assessment techniques (intellectual, personality, aptitude, vocational, and educational), interpret results, and prepare comprehensive reports. Their recommendations are considered in decisions to release prisoners, change their security levels, or assign them to a variety of programs. The above services also are offered to offenders who are serving their sentences, or the end of their sentences, in the community—specifically, those on probation or parole.

Correctional psychologists also offer consultative services relating to corrections staff, which may include screening and selection, employee assistance counseling, and mental health consultation with hostage negotiation or crisis support teams. Research opportunities are often available, particularly—although not exclusively—in the larger prison systems.

The Federal Bureau of Prisons (BOP), an agency of the U.S. Department of Justice, employs doctoral-level clinical or counseling psychologists, licensed or license-eligible general staff psychologists, and substance abuse specialists. The BOP currently supports a team of more than 400 psychologists and 650 mental health/substance abuse treatment specialists in more than 100 federal correctional institutions nationwide. The BOP is organized nationally into six regions and has its headquarters in Washington, D.C. It is one of the largest employers of psychologists in the United States. Entry-level salaries range from \$41,000 to \$80,000, commensurate with experience. More experienced psychologists generally receive salaries ranging from \$70,457 to \$91,589 (GS-14). Salaries at state correctional facilities vary according to region but, in most instances, probably pay slightly less than the BOP.

Research psychologists often study the psychological effects of correctional systems on prisoner behavior. Topics include the general effect of imprisonment on special populations of offenders, such as the mentally disordered or the elderly; the effects of crowding; the effects of isolation; and the outcome of various rehabilitative programs. Interestingly, psychologists in this setting—whether they are primarily researchers or practitioners—are sometimes criticized for aligning themselves with prison administrators or failing to acknowledge the detrimental effects of incarceration. However, many correctional psychologists are concerned about the treatment of prisoners in some facilities—for example, extended periods of isolation—and they work to bring about changes in policies, procedures, and conditions of confinement. Many correctional psychologists find great personal and professional satisfaction working in these settings. In addition, as we will note in Chapter 12, there is ample evidence to support the positive impact of psychology on the correctional system (see, generally, the APA's journal *Monitor on Psychology*, 2003).

Boothby and Clements (2000) conducted an extensive survey of 830 psychologists working in state and federal prisons (but not jails) across the United States; 59% held a doctorate. All psychologists in federal prisons held doctorates, whereas state prisons employed master's- and doctoral-level psychologists about equally. According to the survey, correctional psychologists spend most of their time on administrative tasks (30%), followed by direct treatment of inmates (26%) and psychological testing and assessment (18%). Very little time was devoted to research (6%). In the same survey,

the psychologists expressed a wish that they had more time to offer direct treatment. An additional report based on material obtained in this survey (Boothby & Clements, 2002) will be covered in Chapter 12.

Psychologists working in correctional facilities are guided by a series of recently updated guidelines developed by the **American Association for Correctional and Forensic Psychology (AACFP)** (Standards Committee, 2000). (See Box 1.4 for a description of the AACFP.) Although developed by a “standards” group, they are guidelines that provide the minimum acceptable levels for psychological services offered to offenders, whether they are adults or juveniles, held in local, state, or federal facilities, as well as in the community. They cover a wide range of principles as well as services, including licensure, staffing requirements, confidentiality issues, duty to warn, professional development, informed consent, segregation, and a host of other topics relating to this work.

Defining Forensic Psychology: A Recap

The foregoing sections indicate that the field of forensic psychology, as we define it broadly, provides ample opportunities for psychologists interested in interacting with some aspect of the law. We have devoted separate sections of this book to each of the five subareas defined above. It should be noted that those who favor a narrow definition of forensic psychology are referring primarily to the *clinical practice* that falls under our subareas of *legal psychology* and *correctional psychology*.

Otto and Heilbrun (2002) posit that if forensic psychology (particularly legal psychology) is to continue to grow and develop as a viable discipline, it has to become more mainstream. Currently, they note, a relatively small group of forensic specialists devote themselves full-time to this field, whereas a much larger group of psychologists provide occasional forensic services or provide such services only within a circumscribed area, such as child custody evaluations. They argue that forensic psychology, as a field, must acknowledge the fact that forensic practice is occurring at a variety of levels and for different reasons. The field must develop a plan to ensure that forensic practice overall is well informed and competent. This plan is especially needed in the area of forensic testing and assessment.

Otto and Heilbrun (2002) and Bersoff and his colleagues (1997) suggest that forensic psychology should recognize three levels of psychologists or clinicians who provide services in the field. First, there would be the “legally informed clinician,” who has a basic education in law relevant to professional practice, “including information about confidentiality, privileged communication, and response to subpoenas for clinical records or personal notes” (Otto & Heilbrun, 2002, p. 15). Second, there would be the “proficient clinician,” who has a mid-level expertise gained from academic coursework, professional training, and a supervised experience in forensic psychology. His or her knowledge should consist of relevant law, procedures, and ethics applicable to the kinds of forensic practice in which the individual engages. The third group would be the “specialist clinician,” who would demonstrate the highest level of expertise obtained through formal training in forensic psychology at the graduate and postgraduate levels. His or her training should include intensive and in-depth understanding of

IN FOCUS 1.4 American Association for Correctional and Forensic Psychology

The American Association for Correctional and Forensic Psychology (AACFP) is an organization of behavioral scientists and practitioners who are concerned with the delivery of high-quality mental health services to criminal offenders and with promoting and disseminating research on the etiology, assessment, and treatment of criminal behavior. Students interested in correctional psychology are encouraged to become members of the organization. The goals of AACFP are

- To promote the development of psychological practice in criminal justice and law enforcement settings
- To contribute toward appropriate teaching of the psychology of crime, delinquency, and criminal justice
- To support the development and application of effective treatment approaches for individuals in the care of the criminal justice system
- To stimulate research into the nature of criminal behavior, to exchange such scientific information, and to publish the reports of scholarly studies of criminal behavior
- To concern ourselves with relevant public, professional, and institutional issues that affect or are affected by the practice of psychology in the criminal justice system

the relevant law and legal procedures as well as knowledge about a range of relevant psychological procedures and issues. Whether these three levels of expertise eventually become recognized remains to be seen.

Summary and Conclusions

As recently as 25 years ago, the term *forensic psychology* had barely been introduced into psychological or legal literature. Today, as we have seen, it is a commonly encountered term, but it still defies definition. Although the consensus might seem to favor a narrow definition limiting it to clinical practice, the contributions of research psychologists may be undermined by such an approach. In addition, it is important to consider the context in which forensic psychology is practiced. Limiting forensic psychology to work with civil and criminal courts and correctional systems—which seems to be the consequence of a narrow definition—does not recognize well enough the law-related functions performed by psychologists working with law enforcement or victims. Finally, the many contributions of psychologists who study the psychology of crime and delinquency deserve to be included in this field. The legal system surely can benefit, for example, from research on the developmental paths to delinquency or research on the prevention and control of sex offending.

We have persisted, then, in advocating for a broad definition of forensic psychology, one that could divide it into the five subareas covered in this chapter. In fact, in structuring this book, we came very close to adding a sixth area, the forensic school specialization discussed under crime and delinquency. Given the rapid development

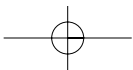
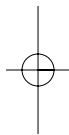
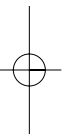
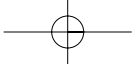
and increasing need for services within the educational system, it may be only a matter of time before such a subarea of forensic psychology is warranted. Likewise, family forensic psychology, discussed under legal psychology but having obvious relevance to other subspecialties, may be deserving of the same special attention. In each of the areas discussed, numerous career opportunities exist. Both undergraduate and graduate programs have rapidly seen the need for preparation for careers in forensic psychology, and professionals themselves are regularly offered opportunities for licensing, certification, and continuing education.

KEY CONCEPTS

American Association for Correctional and Forensic Psychology (AACFP)	Counseling psychologist Diplomate	Forensic psychology Forensic school psychology
American Psychological Association (APA)	Ethical Principles of Psychologists and Code of Conduct—2002	Industrial/organizational (I/O) psychology
Association for Psychological Science (APS)	Family forensic psychology	Legal psychology Police psychology
Availability heuristic	Forensic entomology	Questioned document examination or analysis
Clinical psychologist	Forensic neuropsychology	Specialty Guidelines for Forensic Psychologists
Computer evidence recovery	Forensic psychiatry	
Correctional psychologist		

QUESTIONS FOR REVIEW

- Contrast the narrow and broad definitions of forensic psychology.
- Contrast forensic psychology and other forensic sciences.
- Identify the five subspecialties of forensic psychology covered in this text and provide illustrations of the contributions of forensic psychologists in each one.
- Briefly describe the three levels of forensic psychologists proposed by Otto and Heilbrun.
- What occurred at each of the following historical benchmarks in forensic psychology: 1893, 1908, 1917, 1931, 1968, 1972, 1974, 1978, 1991, and 2001?
- What (a) degrees, (b) licenses, and (c) career opportunities are available to psychologists at the master's level?
- Explain the difference between the PhD and the PsyD.
- What are the five applied branches of psychology?
- How has the American Psychological Association responded to the need to provide services to a diverse client population?
- According to recent surveys, where do those with new doctorates in psychology find employment?



PART II



Police and Investigative Psychology