CHAPTER 2

History and Recent Developments

When seeing a new clients, whether for assessment, therapy, or consultation, one of the first things clinical psychologists do is take a history. Clients are asked about the history of their presenting problem as well as their general psychological and social development (see Chapter 6). In order to develop a thorough understanding of their clients, psychologists need to know how the clients got to where they are today. What interpersonal relationships, social pressures, educational experiences, upheavals, traumas, successes, and failures influenced their clients? In much the same way, we believe that for students to understand contemporary clinical psychology, they must understand its history. Just as clinical psychologists understand their clients by examining the development, growth, and maturation of their lives, students can understand the discipline by exploring its development, growth, and maturation.

No discipline develops in a vacuum. The inception of clinical psychology was the product of a variety of social, political, scientific, and philosophical factors, and these factors continued to influence the field as it developed. The German word *Zeitgeist* means the ideological outlook or climate of the times. Just as clinical psychology’s birth was a function of the Zeitgeist of the late nineteenth century, what clinical psychology is today is a function of the Zeitgeist of the early twenty-first century.

The following sketch of the history and development of clinical psychology is necessarily incomplete. For the reader interested in a more in-depth discussion of the history of the field we recommend *A History of Clinical Psychology* (Reisman, 1991), *Clinical Psychology since 1917: Science, Practice and Organization* (Routh, 1994), or “Hippocrates meets Democritus: A History of Psychiatry and Clinical Psychology” by Donald Routh (1998), which is Chapter 1 of *Comprehensive Clinical Psychology* (Bellack & Hersen, 1998). Much of the following account of the history of clinical psychology is based upon these sources.

**Ancient Roots**

Lightner Witmer founded the first psychological clinic at the University of Pennsylvania in 1896, and that is the year most scholars recognize as the birth of clinical psychology. But one can identify predecessors to the field dating back many centuries. Unlike the roots of a tree, it is difficulty to trace an unbroken connection from the ancient roots of clinical psychology to its budding new developments. Nonetheless, the striking similarity between the
ideass of some ancient scholars and contemporary psychological thought deserves mention. Similarly, one can recognize functions of clinical psychologists in the methods of ancient practitioners.

First, as clinical psychology is a discipline involved in studying and treating mental disorder, it is worth noting that awareness of mental illness, as distinct from physical illness, can be dated as far back as 2100 B.C. to the ancient Babylonians (Brems, Thevenin, & Routh, 1991). In fact, most ancient cultures, including those in South and Central America as well as the ancient Hebrews, recognized and attempted to treat mental disorders. Typically, mental illness was viewed from a religious perspective, and treatments such as prayer, wearing of amulets, or religious rituals were used. It interesting to note, however, that despite the religious lens through which psychological disorders were viewed, some ancient writings suggest recognition of psychological factors and treatment. For example, foreshadowing Freud, ancient Hebrew scholars viewed dreams as expressions of unacceptable wishes and recommended unrestrained communication about one’s worries and troubles (Brems et al., 1991).

Western cultures traditionally trace the roots of medicine and philosophy to the ancient Greeks. A predecessor of contemporary thought about the biological bases of mental illness (see Chapter 4) can be found in the writings of Hippocrates (c. 446–377 B.C.), who hypothesized that psychopathology resulted from imbalances in one or more of the four bodily humors: blood, black bile, yellow bile, and phlegm. An excess of black bile, for example, was considered to be the source of melancholy (depression). The term *melancholy* means “black bile” in Greek (Routh, 1998). Hippocrates also organized mental conditions into types, some of which are still in use today. *Phrenitis* was use to describe the condition in which a person had a high fever and talked nonsense. The condition cleared when the fever subsided. *Mania* described the person who was acutely agitated in the absence of fever. *Hysteria* was used to describe women who presented with vague or difficult-to-understand bodily complaints. *Paranoia* described the person whose thinking was bizarre in the absence of fever.

The writings of the Greek philosophers also foreshadowed ideas that would reappear centuries later in psychiatry and clinical psychology. Socrates (c. 470–399 B.C.) believed that the answers to all questions lay inside the individual and wrote about the healing powers of speaking and self-expression (Brems et al., 1991). Plato’s (c. 428–347 B.C.) writings about the soul are strikingly similar to Freud’s ideas about personality. Plato believed the soul had three levels, the *logistikon* (residing in the head and responsible for logic and reason), the *thumos* (residing in the chest and responsible for courage and aspirations), and the *allogistikon* (residing in the stomach and responsible for instincts and appetites) (Brems et al., 1991). Finally, Aristotle (c. 384–323 B.C.) believed in the healing power of words spoken by patients with mental disorders. All three of these well-known Greek philosophers advocated for humane treatment of the mentally ill.

The Greek philosophers were, of course, not the only ancient scholars to study and theorize about mental illness. Mental disorders, like all forms of illness, result from an imbalance of the powers of “yin” and “yang,” according to the *Yellow Emperor’s Book of Internal Medicine*, which was published in China in the second century B.C. (Routh, 1998). This book includes description of traditional Chinese medical treatments including some, such as acupuncture, that are still in use today.
In addition to writing and thinking about psychopathology, the ancient Chinese also preceded modern clinical psychology by using mental tests for assessing and categorizing individuals. Examinations, which included tests of mental abilities, were used to recruit and select civil servants for over 1,000 years prior to the development of psychological tests in Europe and the United States (Routh, 1998).

While the writings of the ancient Greeks, as well as the writings and practices of the ancient Chinese, foreshadowed important ideas that we would now associate with clinical psychology, it is difficult to discern a direct link between these ancient writings and the modern discipline. In Europe, the link was clearly broken during the Dark Ages. Medieval Europe saw a deterioration of science and philosophy and the ascendance of religion. Mental illness, like most everything, was viewed through a religious lens. Psychopathology was understood as the product of demonic possession or other supernatural forces. Following from this point of view, religious rituals were the treatment of choice. Illustrative of the medieval Zeitgeist was the publication *Malleus Malificarum* ("The Witches' Hammer"), which was a manual for the identification, torture, and trial of witches. The book was endorsed by the pope and went through nineteen editions over a 300-year period (Routh, 1998). Perhaps reflective of women's powerlessness during that period of time, convicted witches (females) outnumbered sorcerers (males) 50 to 1 and were the victims of about 150,000 religious executions in the Dark Ages (Brems et al., 1991).

Although religious thinking about the causes and treatment of abnormal behavior did not recede quickly, the Renaissance saw the reemergence of a scientific and more humanistic approach to people with mental disorders. Important figures during this period of time included Paracelsus (1493–1541) and Johann Weyer (1515–1588). Both men were physicians who rejected spiritual causes of psychological and emotional difficulties. Paracelsus introduced a completely biological approach to mental illness. He argued that human behavior could be understood as a function of biological processes. He practiced a form of medicine that was similar to what we might call homeopathy today (Brems et al., 1991). Weyer made a careful study of individuals identified as sorcerers and witches and was successful at discerning physical causes for their unusual behaviors. Through his observations, Weyer developed a sophisticated descriptive classification system that included toxic psychoses, senile psychosis, hysteria, delusions, paranoia, depression, and epilepsy. Weyer became an outspoken critic of witch hunts and the brutality of faith-based treatment of the mentally ill. In 1583, he published *De Praestigiis Daemonum* ("The Slight of Hand of Demons"), which disputed the *Malleus Malificarum*. Weyer’s book was placed on the pope’s list of forbidden readings (Routh, 1998).

**Eighteenth and Nineteenth Centuries: Laying the Groundwork for Clinical Psychology**

In the eighteenth and particularly the nineteenth centuries important social and scientific developments set the stage for the birth of clinical psychology. Four areas that laid the foundation for clinical psychology were improved understanding of mental disorders, scientific approaches to the measurement of individual differences, the emergence of scientific psychiatry, and the concept of hysteria and the ascendance of psychological determinism.
Understanding of Mental Disorders

The gradual shift away from a religious and toward a medical model of mental illness took a few hundred years to complete. By the eighteenth century, mental illness, or “madness,” was generally accepted as falling under the purview of the medical profession. With the acceptance of the medical model came the development of psychiatry as a specialty branch of medicine. The early pioneers of psychiatry included Benjamin Rush (1745–1813) in the United States, Philippe Pinel (1745–1826) in France, Vincenzo Chiarugi (1759–1820) in Italy, and Francis Willis (1718–1807) in England.

Unfortunately for the mentally ill, the advent of psychiatry resulted in treatment that was, at best, only slightly less horrific than what they endured under the witches’ hammer. The mentally ill were housed in asylums, where they were often chained or otherwise restrained. In most asylums beatings were common, and patients were ridiculed and mistreated by their guardians. They were fed the coarsest of slops. Visits by physicians were infrequent and “treatment” usually consisted of some method of adjusting bodily fluids including purges, blood letting by leeches or other means, and vomits. Benjamin Rush, for example, was given to bleeding his patients frequently and likely hastened the death of many through his treatments. While these methods may seem barbaric by current standards, they were perfectly logical in light of eighteenth-century psychiatry’s understanding of mental illness. The generally accepted view was that most forms of mental illness were caused by an inflammation of the brain due, presumably, to an excess of blood in that area (Dain, 1964). Bleeding, therefore, made sense. Depression or melancholy, unlike other forms of psychopathology, was thought to result from a lack of blood to the brain. Instead of bleeding his depressed patients, Benjamin Rush strapped them to a device he created that spun them around, forcing blood to their brains (McKown, 1961). The starvation diets many psychiatric patients were kept on also had a scientific rationale. Deprived of calories, the patients’ bodies could not produce excess blood, phlegm, or excrement, which was thought to be causing their loss of reason.

In the late eighteenth century, significant efforts were made to reform the way in which the mentally ill were treated. This shift in treatment philosophy has come to be known as the *moral treatment movement*. This movement was initiated, nearly simultaneously, by Phillipe Pinel in France and William Tuke (1732–1822) in England.

Phillipe Pinel was named doctor in charge of the insane at the Bicetre Hospital in Paris on August 25, 1793. When he took control of the facility, he was sickened by what he observed. Patients were housed in filthy narrow cells that were sweltering in the summer and freezing in the winter. They sometimes slept four or more together on a dirty sack. Food was a ration of bread doled out in the morning, sometimes supplemented by thin gruel. Scurvy and dysentery were common. Pinel could not accept a medical or philosophical rationale for what he observed. He wrote, “Forgetting the empty honours of my titular distinction as a physician, I viewed the scene that was opened to me with the eyes of common sense and unprejudiced observations” (Pinel, 1806/1962). Pinel set about changing the conditions at the Bicetre. He removed the chains from most patients, insisted that cells be kept clean, doubled bread rations and distributed them three times a day rather than one, added other foods to the patients’ diets, prescribed work therapy, and prohibited brutality by his staff.
In his book A Treatise on Insanity, Pinel described “the moral treatment of the insane,” which included good food, comfortable lodgings, work therapy, considerate treatment, entertainment, and mild exercise.

William Tuke was a wealthy tea merchant and devout Quaker who in 1791 began to investigate the state of English asylums for the mentally ill when he learned that a fellow Quaker died while a patient of the York Asylum for the Insane (McKown, 1961). When Tuke investigated the York Asylum, like Pinel, he was appalled by what he saw. In 1796, Tuke and his son Henry founded the York Retreat in order to house Quakers who had become mentally ill. The Retreat was a large brick farmhouse set on several acres of land. No walls separated the farm from the road. Patients were allowed to stroll the grounds on gravel walks lined with flowers and shrubs. The Retreat was partially self-sufficient with fruit orchards, vegetable gardens, dairy cows, poultry, and rabbits. Although not prescribed work therapy, as Pinel’s patients had been, patients at the Retreat were expected to do what they could to help around the farm. The York Retreat initially was overseen by William Tuke and subsequently by a line of Tuke men, including Henry, Samuel, and Dr. Daniel Hack Tuke. These men presided over the Retreat as a traditional father would over his family, dealing with patients in a firm yet compassionate manner. The Tukes, especially Samuel Tuke, who published A Description of the Retreat in 1813, were instrumental in spreading moral treatment to the United States.

The moral treatment movement was relatively short-lived and may have been a victim of its own success. The first institution in the United States based upon the premises of moral treatment was the Friends Asylum in Pennsylvania, which accepted its first patient in 1817. Three other institutions—the McLean Asylum, the Bloomingdale Asylum, and the Hartford Retreat—were founded by 1824. These institutions reported striking rates of success. Bolstered by these claims, reformers—most notably Dorothea Dix (1802–1887)—agitated for reform and for government support for institutions to treat the mentally ill. Ms. Dix campaigned tirelessly for public support for treatment facilities for the mentally ill. New Jersey was the first to respond and erected an institution in 1848. In the following years, the construction of over thirty other state institutions for the mentally ill were a direct result of Ms. Dix’s efforts.

By the mid nineteenth century, numerous institutions in the United States were employing moral treatment. However, within twenty years, most institutions had abandoned the tenets of moral treatment and had evolved into custodial institutions for housing the chronically mentally ill. A variety of factors have been implicated in the downfall of moral treatment, including the influx of chronic and severely disturbed as well as poorly educated immigrant patients, the enormous size of the institutions, and the lack of zeal and conviction in the institutions’ superintendents and psychiatrists compared to the moral treatment reformers (Bockoven, 1963; Dain, 1964; Levine, 1981).

Although it predated clinical psychology, the moral treatment movement is significant for the field because it anticipated a shift from a purely medical to psychological treatment. In addition, it facilitated the development of institutions devoted to the treatment of the mentally ill. Finally, the moral treatment movement was instrumental in shifting societal views of the mentally ill from useless individuals who needed to be ostracized from society to a more humanistic view of the mentally ill as human beings deserving of compassion despite their irrationality (Brems et al., 1991).
Measurement of Individual Differences

One of the important figures in the early history of psychological testing was Sir Francis Galton (1822–1911). Although the types of tests that Galton developed bear little resemblance to modern psychological tests, he was one of the first to advocate for, and practice, a scientific approach to the measurement of individual differences (i.e., the dispersion of characteristics in the population). Galton was a fascinating man with an insatiable curiosity. He was the prototypical aristocrat-scholar who devoted himself to intensive study of various topics simply because they piqued his interest. Before he developed an interest in the measurement of individual differences, Galton had already made a name for himself in the scientific community. He had gone to medical school but never completed his medical training because he was distracted by other interests. Galton explored areas of Africa that were previously uncharted by Europeans. For this work he was given a fellowship in the Royal Geographical Society. He later published a book on meteorology.

Galton was in his forties when he read The Origin of Species, which was written by his cousin Charles Darwin and published in 1859. Galton was strongly influenced by Darwin’s theory of evolution and saw practical implications of the theory for human evolution. He saw in the theory of evolution an opportunity to improve the British race. Galton began collecting an assortment of data on men from varying social classes, including aristocrats, businessmen, and university personnel. He analyzed these data using the principles of statistical probability and the normal curve distribution. The result of this work was the publication in 1869 of Hereditary Genius, which, as the title implies, argued that intelligence is inherited. Galton was an unapologetic advocate of eugenics. Since his studies suggested that brighter parents had brighter children, he argued that a better race of humans could be created if more intelligent and successful people were encouraged to mate.

Based upon the premises put forth in Hereditary Genius, Galton believed it was critically important that objective methods of measuring and identifying gifted people be developed. Galton’s choice of tasks to use in the measurement of individual differences followed from the assumption that all knowledge is acquired through the senses. Galton reasoned that intellectually gifted people would have more sensitive sensorily systems and that intellectually limited people would be relatively sensory insensitive. Galton’s tasks, therefore, included tests of color sensitivity, hearing acuity, ability to discriminate between varying weights, and reaction times.

Galton established a laboratory at the South Kensington museum in 1885 and for the next six years measured various characteristics of over 9,000 people. Unfortunately, not much was learned about human intelligence as a result of all this testing. However, Galton did improve upon statistical methods used for analyzing data on individual differences and inspired others to continue with this pursuit.

With respect to the history of clinical psychology, one of the most important people inspired by Galton was James McKeen Cattell (1860–1944). Cattell, an American, had received his doctorate in 1886 in the laboratory of Wilhelm Wundt in Germany, where his dissertation focused upon individual differences in reaction times. After finishing his doctoral degree, Cattell spent a year at Cambridge University, where he met Galton and was highly impressed. Upon his return to the United States, he established a psychology laboratory at the University of Pennsylvania, where he studied tasks similar to those being used by Galton.
In an article published in 1890, Cattell was the first to use the term “mental test.” In this article, Cattell laid down some of the important principles of psychological testing. He argued, for example, for the importance of the adoption of a standard battery of tests that would be administered in exactly the same fashion by different researchers, allowing for comparison of results across investigators. Cattell suggested that the following tests make up a standard battery: the strength of hand squeeze, the time it takes to move one's arm a set distance, the ability to discriminate two points of pressure, the ability to discriminate between two weights, reaction time to sound, reaction time to naming colors, accuracy of bisecting the middle of a 50 cm line, judgment of 10 seconds time, and the number or letters remembered after one presentation. Although these tests did not prove to be measures of important individual differences, Cattell’s work foreshadowed the methods for developing standardized tests of intelligence.

**Emergence of Scientific Psychiatry**

During the nineteenth century there was a growing faith in science and the scientific method. It was in this context that scientific psychiatry emerged as a legitimate discipline. The first order of business for a scientific approach to psychiatry was the development of a system for classifying psychiatric disorders. The nineteenth century saw the initial identification, naming, and detailed description of several major psychiatric conditions. For example, J. Langdon Down described a syndrome involving mental retardation that continues to bear his name. General paresis was identified as a syndrome caused by syphilis. Ewald Hecker published a monograph on hebephrenia, describing its symptoms and deteriorating course.

Probably the most significant nineteenth-century contributor to the development of modern psychiatry was Emil Kraepelin (1855–1926), who published the first edition of his textbook on psychiatry in 1883. In the textbook, which would eventually go through eight editions, Kraepelin provided a rich and detailed description of dementia praecox, a syndrome marked by hallucinations, delusions, progressive deterioration in intellectual functioning, and incongruent emotional expression. In later editions, he described subtypes of the condition including paranoid, hebephrenic, and catatonic. Dementia praecox is what we would now call schizophrenia. Kraepelin differentiated dementia praecox from manic-depressive illness. The former condition was believed to have endogenous causes (i.e., due to inherent, constitutional factors), while the latter was an example of a condition he thought was due to exogenous factors (i.e., caused by external conditions). Kraepelin argued that all mental disorders could be divided into those with endogenous and exogenous causes. Kraepelin believed endogenous diseases were incurable but that patients with exogenous disorders had a more favorable prognosis.

The emergence of scientific psychiatry helped set the stage of clinical psychology in a variety of ways. First, improved classification created a need for improved methods of making differential diagnoses. Assessment, as we will see, is one of the cornerstone activities of clinical psychology. Diagnostic assessment was one of the first practical problems psychological tests were developed to address. Second, the differentiation of mental retardation from other psychiatric conditions created a need for valid instruments for assessing intellectual functioning. Third, psychiatric classification systems, most notably Kraepelin’s, identified
some psychiatric conditions that may have nonbiological causes. The most important psychiatric syndrome for which nonbiological causes were considered was *hysteria*.

**Hysteria and the Ascendance of Psychological Determinism**

Hysteria referred to a condition in which patients presented with vague or unusual medical complaints, many of which appeared to be neurological, for which no physical basis could be identified. Patients with hysteria, usually adolescent or young-adult females, had such problems as anxiety, fatigue, memory loss, anesthesia (loss of feeling, including sensory impairments), and paralyses, none of which could be traced to recognizable biological abnormalities or physical malfunctions. The typical patient was an intelligent and well-educated yet politically powerless young woman whose allotted role in society was a rigidly predetermined ritual of marriage, child-bearing, domestic duties, and household management. Modern commentators point out that some of the symptoms of hysteria—those involving passivity, dependency, and emotionality—largely matched the contemporary expectations for women’s behavior (Bernheimer, 1990; Kahane, 1990). Most European physicians dismissed hysterics as devious fakers seeking sympathetic attention.

Unlike his contemporaries, the brilliant French neurologist Jean Martin Charcot (1825–1893), was fascinated by the phenomena of hysteria. Charcot believed that hypnotism, a newly discovered procedure that was garnering a great deal of attention in European intellectual circles, was a condition that could only be induced in hysterics. Charcot believed that one could not study hysteria without hypnosis since the two phenomena were so closely related. By conducting objective neurological examinations of people under hypnosis, Charcot believed that he had demonstrated that the hysteric’s symptoms could not be produced by conscious deception (Zilboorg & Henry, 1941).

One of Charcot’s pupils, Pierre Janet (1859–1947), dismissed Charcot’s idea that a hypnotic trance could only be induced in patients with hysteria. After carefully examining the histories of his hysteric patients (taken while they were under hypnosis), Janet discovered that many of them had experienced a significant emotional shock prior to the onset of the hysterical symptoms. The patients reported no conscious memories of these traumas when not under hypnosis. Janet speculated that the emotionally shocking events had been pushed into some unconscious part of the patients’ minds. Janet’s thinking was that this forgetting was a maladaptive feature of the hysteric’s personality.

A contemporary of Janet, who also studied briefly with Charcot, was a young Viennese physician named Sigmund Freud (1856–1939). Although we will delay the telling of Freud’s story until Chapter 3 when we discuss the development of psychoanalysis, suffice it to say that Freud’s writings about the psychological causes of hysteria and other conditions had a dramatic impact on psychiatry in Europe and the United States. For our current purposes, it is important to note that the work of Charcot, Janet, and others—notably Joseph Breuer (1841–1925) and Hippolyte Bernheim (1837–1919)—had a significant impact on Freud’s thinking about psychopathology.

Although Freud was a trained as a physician and developed the related discipline of psychoanalysis, his impact upon the field of clinical psychology was significant. Freud opened the door to nonbiological (and nonspiritual) thinking about mental disorders. His
psychoanalytic treatment, and the varied psychodynamic therapies it spawned, were the dominant approaches to psychotherapy for most of the twentieth century. Furthermore, Freud's ideas about the unconscious influenced the development of psychological testing, most notably the development of projective techniques (see Chapter 8). Finally, Freud, perhaps more than any other figure, firmly ensconced the importance of psychological factors in understanding human behavior.

The Birth of a Discipline: 1890–1910

In the 1890s psychology was a young but rapidly growing science. The first psychology laboratories had been established in 1879 by Wilhelm Wundt (1832–1920) at the University of Leipzig in Germany and William James (1842–1910) at Harvard University in the United States. G. Stanley Hall (1844–1924) established the second U.S. laboratory in 1883 and James McKeen Cattell opened the third in 1888. By 1900, however, there were over forty psychology laboratories in the United States (Benjamin, 1996). Psychology was defining itself as a scientific discipline devoted to understanding the human mind and behavior. However, very early on there were those who saw the applicability of the young science to alleviating human problems. Lightner Witmer (1867–1956) and Alfred Binet (1857–1911) were two of those pioneers.

Witmer received his bachelor's degree from the University of Pennsylvania in 1888. He became an assistant to Cattell at Pennsylvania but later transferred to the University of Leipzig to complete his Ph.D. under Wundt. After completing his degree, Witmer returned to the University of Pennsylvania, where he continued his research. There are various stories about how Witmer got interested in applied psychology (Reisman, 1991). In one version, he was challenged by a public school teacher to demonstrate the practical use of the new science of psychology by helping a child overcome a chronic problem with poor spelling. Witmer identified that the child had a visual problem and had some success at improving the boy's spelling. Encouraged by his success, Witmer began to work with other children with learning difficulties.

In 1896, Witmer established the world's first psychological clinic. The clinic worked primarily with children who were having difficulties in school. Today these children would likely be labeled mentally retarded, learning disabled, or autistic. The type of work done in the clinic was a predecessor to the field of school psychology (Fagan, 1996).

Witmer attended a meeting of the American Psychological Association in 1896 and described his new psychological clinic for his colleagues. Witmer proposed that psychologists should continue to function as scientists but also apply what they learned to address practical problems. He shared his vision of the psychological clinic as a place where public service, research, and instruction of students could be carried out at the same time. To say that his audience was not enthusiastic about what Witmer proposed would be kind. His talk “stimulated the elevation of some of his colleagues’ eyebrows but little else” (Reisman, 1991, p. 39). Fortunately, Witmer was hard-headed and continued with his work, expanding the operations of his clinic, training students, and publishing case studies and original research.
While some historians of psychology have deemed Witmer worthy of little more than a footnote, his contributions to clinical psychology were substantial (McReynolds, 1996). In addition to establishing the first clinic, Witmer was the first to formally propose a new helping profession, distinct from medicine and education, to be called clinical psychology. He established the field’s first journal, the *Psychological Clinic*, and was its first editor. The journal operated until 1935 and is considered to be the forerunner of the *Journal of Consulting Psychology*. Finally, Witmer established the first training program in clinical psychology and provided a framework for what clinical training should look like (e.g., doctoral-level education that included supervised clinical experience). By the 1920s, many of Witmer’s graduates were making significant contributions of their own, mostly in the area of school psychology. Another interesting outgrowth of Witmer’s training clinic was that it attracted and welcomed a relatively large number of women. Consequently, women were well represented in the field of school psychology throughout the twentieth century (Fagan, 1996).

Alfred Binet was another important figure in the birth of clinical psychology. Like Witmer, Binet’s main contribution was triggered by an interest in applying psychology to helping children in the educational setting. Like many of the key figures in the early days of clinical psychology, Binet pursued a variety of interests before making his lasting mark upon clinical psychology with his studies of intelligence. Binet obtained a law degree in 1878 but never practiced. His scientific curiosity drew him to study, but not practice, medicine. Binet was influenced by Charcot and in the 1880s turned his attention to psychological research. He did some early experiments and published books and papers on hypnosis, hysteria, and fetishism, among other topics. In 1889 he co-founded the first psychological laboratory in France as well as the first French journal of psychology. Binet received a doctorate of sciences degree in 1894 and in 1895 became director of the psychology laboratory he had co-founded.

In 1904, the Minister of Public Instruction in Paris appointed a commission to study how to best serve the needs of impaired children in the educational system. The plan was to develop special classes to assist these children. The problem faced by the commission was how to identify the children who could not benefit from instruction in the regular classroom. Binet, along with Theodore Simon (1873–1961), the chief medical doctor of an asylum in Paris, offered to assist with the problem. The product of their collaboration was the 1905 Binet-Simon scale, composed of 30 items arranged in order of difficulty. Binet and Simon continued to work with and define their scale and produced a more sophisticated version in 1908. The new edition included more items, which were grouped by age levels from 3 to 13. They selected items for the scale by systematically testing them with normal children. The rule was that if more than 60 percent but less than 90 percent of the children at a given age got an item right, it was considered appropriate for that age and was included in the test (Watson, 1978). Table 2.1 includes items from both ends of the 1908 Binet-Simon scale. In the 1908 edition, Binet and Simon introduced *mental age* as the score for their scale. If a child got all the items right at the age 8 level of the test, he or she was considered to have a mental age of 8. Binet and Simon developed a classification system for children based upon their performance on the scale. An *idiot* had a mental age of 2 years or lower; an *imbecile’s* mental age was from 3 to 7 years; and a *moron* had a mental age above 7 years. A third version of the scale was published in 1911 that extended the scale from age 3 to adult.
Binet's scale was revolutionary in several ways. First, by choosing items based upon how normal children responded, Binet had created the first, albeit crude, norm-referenced test of intelligence. This reflected Binet's idea that the best way for psychologists to study individual differences was first to understand the norm and than look at how the individual differed from the norm. Second, the items Binet chose for his scale reflected his thinking about intelligence. Remember, "mental tests" had already been introduced by Cattell. Unfortunately, Cattell's tests proved not to be particularly valid measures of anything, especially intelligence. Unlike Cattell's tests, which focused upon sensory and motor functioning, Binet's tasks measured complex intellectual processes such as judgment, problem solving, abstract reasoning, and memory. These types of tasks proved to be useful in measuring individual differences among children.

Although not without its critics, the Binet-Simon scale was quickly adopted by researchers and clinicians interested in intelligence and the classification of defective children. For example, in 1909, the city of Rochester, New York, appointed an examiner to use

---

### TABLE 2.1 Items from the 1908 Binet-Simon Scale

<table>
<thead>
<tr>
<th>Age 3 Years</th>
<th>Age 4 Years</th>
<th>Age 12 Years</th>
<th>Age 13 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Points to nose, eyes, mouth.</td>
<td>1. Knows sex.</td>
<td>1. Repeats seven digits.</td>
<td>1. Draws the design that would be made by cutting a triangular piece from a once-folded edge of quatro-folded paper.</td>
</tr>
<tr>
<td>2. Repeats sentences of six syllables.</td>
<td>2. Names certain familiar objects: key, pocketknife, and penny.</td>
<td>2. Finds in one minute three meanings for a given word: obedience.</td>
<td>2. Rearranges in imagination the relationship of two triangles and draws the results as they would appear.</td>
</tr>
<tr>
<td>3. Repeats two digits.</td>
<td>3. Repeats three digits.</td>
<td>3. Repeats a sentence of 26 syllables.</td>
<td>3. Gives differences between pairs of abstract terms, as pride and pretension.</td>
</tr>
<tr>
<td>4. Enumerates objects in a picture.</td>
<td>4. Indicates which is longer of two lines 5 or 6 cm in length.</td>
<td>4. Answers problem questions (common-sense test).</td>
<td></td>
</tr>
<tr>
<td>5. Gives family name.</td>
<td></td>
<td>5. Gives interpretations of pictures.</td>
<td></td>
</tr>
</tbody>
</table>

the Binet-Simon scale to identify students for special classes that had been developed for subnormal children. Henry Goddard (1886–1957), who was the director of the research laboratory at the Institute for Backward Children at Vineland, New Jersey, learned about the Binet-Simon scale in 1908 and set about revising it for general use in the United States. Goddard, who is given credit for coining the term “moron” to identify the higher functioning among the intellectually impaired, published an English version of the Binet scale in 1911. Interest in Binet’s work was not limited to France and the United States; his scale was quickly adopted for use in Belgium, Germany, Italy, and England as well (Reisman, 1991).

Alfred Binet died suddenly in 1911 at the age of 54. His contributions to the fledgling field of clinical psychology were enormous. First, Binet’s scale was the forerunner of modern tests of intelligence. His recognition that assessing what is commonly meant by intelligence requires complex tasks was a breakthrough for mental testing. Second, his development of the mental age concept foreshadowed the creation of the intellectual quotient (see Box 7.2 for discussion of measuring IQ). Third, Binet was an early example of what would later come to be called a scientist-practitioner. He demonstrated how the young science of psychology could be utilized to address practical human problems. Finally, the success of Binet’s scale was a key factor in initiating a boom in psychological testing.

Witmer and Binet were certainly important figures in the birth of clinical psychology but we do not want to give the reader the impression that they were that were the only important pioneers of this era. For example, in the 1890s other early psychologists made preliminary efforts to study psychopathology from a psychological perspective. For example, in 1896, James Sully organized a psychological laboratory for the study of “difficult children.” And in 1897 William Krohn (1868–1927), who was a founding member of the American Psychological Association, established a laboratory for studying people with mental illness at the Eastern Hospital for the Insane in Kankakee, Illinois (Reisman, 1991). In addition, psychological clinics were established at the University of Iowa and at Clark University in 1909. Other evidence that clinical psychology was gaining acceptance in academia can be taken from the fact that both the University of Minnesota and the University of Washington added courses on clinical psychology in the first decade of the new century and both schools later established psychological clinics (Reisman, 1991).

Another important development in this time period was the creation of the first professional organization for psychologists in the United States. The American Psychological Association was founded in 1892 by G. Stanley Hall and six other “rugged pioneers.” In its first year the organization boasted 31 members. By 1910, the APA had grown to 222 members. At this period of its development, clinical psychology did not feature at all prominently in the workings and discussions of the APA. Nonetheless, the organization was to play an important role in defining and regulating the field in its later development.

**Childhood: World War I through World War II**

If clinical psychology was born in the 1890s, the period starting with World War I and ending with World War II could be considered its early and middle childhood. The field was developing but was still struggling to create its own identity. Nonetheless, the advancements that took place in the thirty years between 1915 and 1945 were crucial to the later blossom-
ing of clinical psychology. We have organized the discussion of this epoch in the field around three areas: assessment, theory, and professional development.

Assessment

In 1914, relatively minor skirmishes in the Balkans region of Europe erupted into full-scale warfare. By 1916, the first “world war” was in full swing, and by 1917 the United States declared war on Germany and threw itself into the “war to end all wars.” This was a period of fervent patriotism for many Americans. Men and women from all walks of life, including academia, were expected to do their part, and many psychologists responded to the call. The practical problem of selecting people, mostly men, for their suitability for enlistment spurred the rapid development of tests of mental abilities.

When the United States entered WWI, APA president Robert Yerkes (1876–1956) formed a committee to work with the Army to develop methods of classifying recruits according to their abilities. Among the more important products of the group’s work was the development of two group administered test of intelligence called the Army Alpha and the Army Beta. The Alpha test was a verbal scale for use with English-speaking recruits. The Beta was a nonverbal test of intelligence that was developed to assess men whose primary language was not English.

During the war over 1,700,000 men were tested in groups and another 80,000 plus were examined individually. This was the first time that normative data on psychological tests were gathered on such a large scale. In some ways, the picture of the young-adult American male that emerged from this massive testing was not particularly flattering. Over 500,000 were found to be illiterate, about 8,000 were discharged due to low intellectual ability, and another 20,000 were assigned to units where their work would not be intellectually challenging. The average mental age of the U.S. soldier was estimated to be 13.5 years. Findings of these type were made public and spawned an interest in intellectual testing.

The period between the two world wars saw a huge amount of work in the area of intellectual testing. In the tradition of the Army Alpha and Army Beta, several group-administered tests of intelligence and mental abilities were developed in the 1920s, including the Otis Classification Test (1923), the Institute of Educational Research Intelligence Scale (1925), Miller Analogies Test (1926), and others. Individually administered tests of mental abilities were also developed. Lewis Terman revised the Binet scale, collected normative data from a sample of children and adults in the United States, and published the Stanford-Binet Scale in 1916. The Stanford-Binet scale was the most popular individually administered test of intelligence in the 1920s and 1930s. However, other individually administered tests designed for measuring intelligence were also developed and gained popularity during that period of time. For example, the Goodenough Draw-A-Man Test (1926) measured a child’s intelligence by scoring a drawing the child produced in response to the instructions “draw a man.”

A major revision of the Stanford-Binet Scale was published by Lewis Terman and Maud Merrill in 1937. The test included age levels ranging from 2 years to a “Superior Adult III” category. The test had two equivalent forms, L and M, to minimize practice effects when the same individual was tested on separate occasions and was normed on a sample of over 3,000 individuals chosen to represent a cross-section of the United States population.
The 1937 edition of the Stanford-Binet was the preferred measure for assessing children’s intelligence for the next two decades.

Along with the 1937 revision of the Stanford-Binet, the publication of the Wechsler-Bellvue scale in 1939 was the most significant development in the area of intellectual testing during that era. David Wechsler was chief psychologist at the Bellvue Psychiatric Hospital in New York City when he developed his test of intelligence (see Box 2.1 for a brief biography of Wechsler). He was dissatisfied with the available methods of measuring intelligence in adults because they tended to be upward extensions of measures originally designed for children. He wanted to create a scale that had clinical utility in evaluating adults who had suffered deterioration in their mental abilities. The Wechsler-Bellvue was one of the first individually administered intelligence tests developed for use with adults. The inclusion of verbal and nonverbal items was innovative and contributed to the rapid acceptance of the test (Matarazzo, 1972). The Wechsler-Bellvue was the first in a series of tests of intelligence that bear Wechsler’s name and that became the most popular IQ tests used in the United States.

Advances in psychological testing were not limited to the arena of intellectual assessment in the period between the world wars. Psychologists were also devoting their attention to developing tests for measuring personality and diagnosing mental disorders. Once again, the practical issues facing the military in WWI prompted important developments in psychological testing. In 1917 Robert Woodworth (1869–1962) created the first test for detecting mental disturbances. Called the Psychoneurotic Inventory but labeled the Personal Data Sheet so that the soldiers completing it would not be alarmed, the test served well as a screening instrument for identifying recruits suffering with various mental conditions (Reisman, 1991).

In 1921 Herman Rorschach (1884–1922) published *Psychodiagnostik*, in which he described a method of diagnosing patients, and characterizing features of their personalities, based upon their responses to a set of ten ink blots. Rorschach showed, for example, that his inkblot method was useful in identifying individuals with schizophrenia. Unfortunately, Rorschach died shortly after the publication of his monograph and it was left to others to develop and popularize the test.

Next to the Rorschach, the Thematic Apperception Test (TAT) is probably the best-known projective test of personality. And, like the Rorschach, it was first published and popularized in the period between the world wars. Henry Murray (1893–1988) developed the test at the Harvard Psychological Clinic and published it in 1938.

The other major test to appear on the scene in this time period was the Minnesota Multiphasic Personality Inventory (MMPI). Developed in the late 1930s by a psychologist and a neurologist at the University of Minnesota Hospitals, the MMPI was an empirically derived test designed for the purpose of making differential diagnoses among psychiatric disorders. The MMPI, originally published in 1943, became the most widely used clinical assessment instrument of all time.

World War II triggered another growth spurt in psychological testing. Once again, psychologists were asked to develop and improve upon tests that could be used for the evaluation and classification of military personnel. In addition to general tests of intellectual ability and academic achievement, psychologists helped develop tests for the selection of naval officers, pilots, submarine personnel, and spies. It has been estimated that in 1944 alone, over 60 million standardized tests were administered to 20 million people (Reisman,
David Wechsler, an Early Scientist-Practitioner

David Wechsler emigrated to the United States from Romania at age 6. He received his bachelor's degree from the College of the City of New York in 1916 at age 20 and his master's degree a year later from Columbia. As fate would have it, the United States entered into World War I in 1917, significantly impacting Wechsler's intellectual development and interests. While waiting to be inducted, he worked under the supervision of the eminent psychologist E. G. Boring, scoring and interpreting the performance of thousands of newly recruited troops on the Army Alpha. Once in the Army, his first assignment once again involved intellectual measurement. He assessed recruits using the Stanford-Binet and other scales. Later, while still in the Army, he had the opportunity to work with Charles Spearman whose theorizing about a “g” factor in intelligence (see Chapter 7) impressed Wechsler. After his discharge from the armed services, Wechsler won a scholarship to study in France, where he met Theodore Simon.

Wechsler earned his Ph.D. from Columbia in 1925. After holding a variety of positions, he accepted the post of Chief Psychologist at Bellevue Psychiatric Hospital in 1932. It was there that Wechsler turned his intellectual and creative talents toward the problem of measuring adult intelligence. Wechsler (1939) pointed out several problems with the available instruments for measuring intelligence in adults. He noted that most were developed for assessing intelligence in children and adapted for adult use by adding more difficult items. In addition, he pointed out the fact that the mental age method of measuring intelligence was not applicable to adults. As an alternative Wechsler offered the deviation IQ, which related the individual’s IQ score to the average score for similarly aged people (see Chapter 7, Box 7.2, for discussion of methods of measuring IQ). The deviation IQ is one of Wechsler’s many significant contributions to the area of intellectual assessment (Matarazzo, 1972).

Although Wechsler developed the Wechsler-Bellvue scale before there ever was a Boulder conference, he is a good example of a scientist-practitioner. Wechsler was trained first as a psychological scientist. He used his knowledge of the principles and methods of his science to help better understand the clinical problems he faced at Bellvue Hospital. His work with clinical populations informed his scientific work, the results of which improved his, and countless others’, clinical practice.

1991). In addition to the use of testing for classification, the use of tests as part of an individualized diagnostic evaluation also grew during the war. The physical and psychological trauma suffered by soldiers produced a need for idiographic clinical assessment. The recently developed MMPI, Wechsler-Bellvue, and Rorschach were used extensively during the war and the identification of clinical psychology with these tests grew stronger.

Theory

The dominant theory in psychiatry and clinical psychology at this point in history was clearly psychoanalysis. Freud was hardworking and productive throughout his life, and the period between the world wars was no exception. Although many view his earlier work, notably *Interpretation of Dreams* (1900), as his most important, his later writings contributed
significantly to the dispersion of his ideas and his legacy. Freud published *Beyond the Pleasure Principle* in 1920, *The Question of Lay Analysis* in 1926, *The Ego and the Id* in 1927, *Inhibitions, Symptoms, and Anxiety* in 1936, and *Moses and Monotheism* in 1939. His ideas were further promulgated by his many students and followers, most notably his daughter Anna Freud (*The Ego and Mechanisms of Defense*, 1937).

In the 1920s and 1930s, psychoanalysis had its most direct impact upon the developing field of clinical psychology through its influence upon psychological testing. Although neither Rorschach nor Murray were Freudian, the influence of psychoanalytic thinking can be seen in how others interpreted their tests. Psychoanalytic symbolism appeared in interpretation of psychological, particularly projective, testing. For example, Card IV of the Rorschach inkbows was referred to as the “father card” in many circles because the inkblot is commonly seen as a monster figure. Another example of the influence of Freudian thinking upon the interpretation of projective material is in human drawings in which the nose is commonly seen as a phallic symbol (Handler, 1996).

Outside of psychoanalysis, other important theory development was occurring around this time. In Russia, Ivan Pavlov (1849–1936), a physiologist, was doing his landmark work on classical conditioning. Pavlov had already had a successful career as a physiologist before beginning his work on reflex learning. In 1904 he won a Nobel Prize for his work on digestion. Pavlov was, in fact, studying the functioning of saliva in digestion when he became interested in conditioning. Pavlov had noticed that the dogs he studied began to salivate when they saw the meat—before it was given to them. Pavlov reasoned that the normal salivation to food on the tongue had become conditioned to the sight of the food. Pavlov devoted his keen intellect and strong work ethic to working out the parameters of this form of learning. In his elegant demonstrations of classical conditioning in dogs, Pavlov showed that stimuli that previously did not call forth a reflex response (e.g., salivation) would come to do so following a particular experimental procedure. Initially, healthy dogs routinely produced saliva in response to the presentation of food. But Pavlov showed that, under special conditions, dogs could also learn to salivate in response to a bell being rung, or a whistle being blown, or even the presentation of a diagram of a circle on a piece of white card. The experimental procedure that produced such results involved repeatedly presenting the new stimulus (e.g., the bell being rung) a fraction of a second before, the reflex-eliciting stimulus (e.g., the food). The pairing of the two stimuli was made repeatedly until the response normally produced in the reflex began to be produced by the new stimulus. In Pavlov’s terminology, the original connection between the food and the salivation is an unconditioned reflex (unconditioned, because no new learning is required). Specifically, the food is an unconditioned stimulus (UCS) and the salivation is an unconditioned response (UCR). After several pairings of the bell and the food, such that the previously neutral sound of the bell could elicit salivation in the dogs, the bell has become a conditioned stimulus (CS). This conditioned stimulus had now taken on the power to trigger salivation itself. Salivation in response to the conditioned stimulus, the bell, is referred to as the conditioned response (CR).

Although not initially aware of Pavlov’s work, John B. Watson (1878–1958) initiated a new branch of psychology, behaviorism, with an article entitled “Psychology as a Behaviorist Views It” in 1913. The article was a bold statement in which Watson sought to redefine psychology from a science of consciousness to a science of behavior. Watson is considered the founder of U.S. behaviorism. He is well known for his provocative statements
about the importance of the environment and learning in shaping human behavior. One of his more famous quotes captures the essence of Watson’s view: “Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I’ll guarantee to take any one at random and train him to become any type of specialist I might select” (Watson, 1928, p. 10).

While Watson sought to create a new psychology, his most famous experiment had to do with a clinical phenomenon—phobia. His demonstration of fear conditioning in *Little Albert* paved the way for conditioning models of anxiety disorders. In this study, Watson and his collaborator Rosalie Rayner demonstrated that a healthy 11-month-old child, who showed no fear of a white rat, developed an intense fear of the rat and related stimuli after several learning trials in which the rat was paired with the sudden sound of a steel bar being struck (Watson & Raynor, 1920).

Watson’s academic career was cut short in 1920 when divorce proceedings were initiated against him, and sensational publicity resulted. He was asked to resign his professorship at Johns Hopkins University. Later that year, he married Rosalie Raynor. Watson went on to have a successful career in advertising.

In a sequel to Watson and Raynor’s (1920) famous study, Mary Cover Jones (1924) used conditioning principles to eliminate an irrational fear in a young child. A 2-year, 10-month-old boy named Peter had an extreme fear of rabbits. Jones treated Peter’s fear in the following manner. The boy was placed in a relaxing playroom, with nonfearful children, and given something enjoyable to eat. The rabbit was introduced to the room and gradually brought closer and closer to Peter. Eventually, he was able to touch the animal without showing signs of distress.

The demonstrations by Watson and Raynor (1920) and Mary Cover Jones (1924) were interesting and pioneering. However, they did not have an impact on psychotherapeutic practices at the time, which were dominated by psychoanalysis and derivative psychodynamic therapies. Nonetheless, they laid the groundwork for the behavior therapy movement that would have a significant impact upon clinical psychology in the 1950s and later.

**Professional Developments**

Over the first fifty years of the existence of the field, the professional activity associated with clinical psychology was testing. Paralleling the growth in development of psychological tests occurring in the period between world wars, there was growth in the number of psychologists working outside of academia. Psychologists were employed in child guidance clinics, psychiatric clinics, hospitals, psychoeducational clinics, juvenile detention facilities, and industry. Although professional psychologists expanded their clinical activities in the 1930s, they functioned largely as psychological examiners prior to WWII.

Psychologists’ identification with the relatively new field of applied psychological testing created opportunities for business and professional development. In 1921, for example, James McKeen Cattell founded the Psychological Corporation and convinced some 200 other psychologists to buy shares of stock in the venture. Originally set up as an organization that would sell psychological tests, consult to companies on psychological matters, and carry out studies for clients, it blossomed as a developer and marketer of psychological tests. The Psychological Corporation set standards for the tests it marketed and in so doing
had a moderating influence on the extravagant claims being made about some psychological tests. The Psychological Corporation became a successful company that is still a major player in the multimillion-dollar psychological testing business.

As more psychologists found employment outside of universities, the American Psychological Association struggled with how to deal with these nontraditional psychologists. On the one hand, APA wanted to be the one organization to represent all of psychology. On the other hand, it was formed as an organization devoted to the promotion of the science of psychology. Qualification for membership reflected the organization’s scientific emphasis. In the 1921, for example, membership in APA required a Ph.D. in psychology and published post-doctoral research. By 1926, APA created an associate member status. While full membership still required publications, one could be an associate member without ever having published a paper. By the early 1930s, associates outnumbered members of the organization.

There were several efforts by clinical psychologists to form their own professional organizations in the early years of the discipline. As early as 1917, a group of 49 psychologists formed the American Association of Clinical Psychologists (AACP). Two years later, this organization was incorporated into APA becoming the Section of Clinical Psychology (Brems et al., 1991). In 1921 a disgruntled group of clinical psychologists formed the New York State Association for Consulting Psychology. In 1930, this organization expanded to create the Association of Consulting Psychologists. In 1937, the American Association of Applied Psychology (AAAP) was formed. In 1938, AAAP took over the publication of the Journal of Consulting Psychology, which was created the year before by the Association of Consulting Psychology. By the close of the 1930s, there were over 2,000 members and associates of APA, of which about 40 percent did not hold academic positions and about 12 percent defined themselves as clinical psychologists (Reisman, 1991). The clinical psychologists in APA were frustrated. They had disbanded the Clinical Section of APA in 1937 and many sought an organizational home in AAAP.

By the late 1930s many clinical psychologists were also frustrated with the limited roles of psychological examiners and diagnosticians. These psychologists were interested in treatment and some were beginning to conduct psychotherapy, albeit on a limited basis. The expansion of psychologists into psychotherapy was not greeted positively by their colleagues in psychiatry. In fact, the medical profession as a whole fought against clinical psychologists’ moving beyond psychological testing. In the 1920s, psychiatry fought against clinical psychologists functioning as diagnosticians. They were okay with psychologists doing the testing to establish IQ, for example, but the diagnosis of mental retardation was viewed as the purview of the psychiatrist (Reisman, 1991). By the 1930s, diagnosing was an accepted professional activity of clinical psychology, but psychotherapy was seen by psychiatry as a service that could only be provided by a medical professional. Efforts by organized psychiatry to limit the scope of psychological practice continued throughout the twentieth century and to the present time (e.g., psychiatry is vigorously fighting psychologists’ efforts to obtain prescription privileges today).

Professional psychology was changing rapidly as the 1930s gave way to the 1940s, and the APA recognized the need to change if it was to remain vital as the premier organization representing psychology. In 1939, there were 618 members of APA and 1,909 associates. The associates were restless and it was widely recognized that the impediment to membership was the post-doctoral research requirement. Meanwhile, the AAAP was growing, reaching
615 members in 1941. By 1942 work was underway to reorganize APA to maintain the growing number of clinical members and to entice those who had defected to return to the organization. A joint committee of APA and AAAP developed a constitution that redefined the objective of APA to be “to advance psychology as a science and means of promoting human welfare.” The change in stated objective, as well as the internal organization of the APA, marked a shift toward greater attention to the concerns of professional (i.e., nonacademic) psychologists. The other major change included in the new constitution was that the publication requirement for membership was dropped. In 1944, the constitution was accepted and AAAP voted itself out of existence and transferred its membership to APA.

At this point of the world’s history, of course, the changes in a relatively small professional organization were inconsequential compared to the massive reorganization of governments and world powers that was taking place as a result of WWII. But our focus is on clinical psychology, and for our discipline the changes that coincided with, and followed, WWII were as dramatic as those that were happening on the larger world stage. As with the WWI, WWII called for the processing and classification of millions of men for military service. Many individuals were rejected from military service because of psychological difficulties. In fact, “mental disease” ranked second to visual defects as the most common reason for rejection (Rowntree, 1943). In addition, the large number of psychological, neurological, and physical casualties of the war created a huge demand for diagnosticians and therapists. Psychologists, many of whom were already stretching their professional activities to include psychotherapy, were ready and willing to fill the need for psychotherapists. Early in WWII, psychologists tended to be used for selection and classification of military personnel. But as the war progressed and the casualties mounted, more and more psychologists were called upon to provide clinical services. Over half of the psychologists who served in the armed forces during WWI provided some counseling or psychotherapy services. Perhaps the most important way in which WWII impacted the development of clinical psychology was that it triggered a chain of events that pushed the field to define itself and create a model for training.

Adolescence: Post WWII and the Development of an Identity

Not to drag out the analogy to a child’s development too far, in many ways the years immediately following WWII represent the adolescence of clinical psychology. Developmental psychologists recognize that the most important psychological challenges for adolescents are to develop a sense of identity and the capacity to function independently. The first task the field had to take on was defining itself and the next was to struggle for independence.

Prior to WWII, very few graduate programs offered training in clinical psychology. Some graduate programs offered a few clinical courses and a few had clinical practicum experiences available. But for most psychologists, clinical training took place after graduate school and most of it was “on the job.” The APA was ambivalent about getting involved with the training of clinical psychologists. By 1935, however, pressure had grown in the organization to make a statement about what clinical psychology is and how clinical psychologists should be trained. The APA Committee on Standards of Training was formed and
defined clinical psychology as “that art and technology which deals with the adjustment problems of human beings” (Report of Committee, 1935). The committee recommended that psychologists wishing to identify themselves as clinical should have a Ph.D. and a year of supervised experience. Indicative of APA’s ambivalence at the time, the committee published its report and promptly disbanded.

By the end of the WWII the APA’s interest in clinical training had changed dramatically. The organization responded to the demand for clinicians that followed the war. For example, there were 16 million U.S. veterans of the war and an additional 4 million pre-WWII veterans; 44,000 of these veterans were in Veterans Administration hospitals. The VA announced that it needed 4,700 clinical psychologists. In addition to the need for trained clinical psychologists, the APA was also responding to the huge amount of money that was being invested into training of clinical psychologists through the VA and the United States Public Health Service. The VA and the USPHS asked the APA to help them identify graduate training programs in clinical psychology that provided appropriate and high-quality training. The APA responded to this request by appointing a committee, chaired by David Shakow, to develop a model for training clinical psychologists.

Shakow’s committee issued its report, which has come to be known as the Shakow report, in 1947 (American Psychological Association, 1947). The report recommended that clinical psychologists be trained at the doctoral level. Training was envisioned as lasting four years, the first two of which were at the university and were devoted to training in the science of psychology, research methods, and statistics, as well as diagnostic and therapeutic methods. The third year of training was to be spent on internship and devoted to full-time clinical work. In the final year of training, the doctoral student would return to the university to carry out his or her dissertation research. The committee recommended that course work cover general psychology, psychodynamics of behavior, diagnostic methods, research methods, therapy, and related disciplines. The committee’s report emphasized the importance of training in research and the continuity between clinical psychology and the field of psychology in general:

A clinical psychologist must first and foremost be a psychologist in the sense that he can be expected to have a point of view and a core of knowledge and training which is common to all psychologists. This would involve an acquaintance with the primary body of psychological theory, research, and methods on which further training and interdisciplinary relationships can be built. Preparation should be broad; it should be directed to research and professional goals. Participants should receive training in three functions: diagnosis, research and therapy, with the special contribution of the psychologist as a research worker emphasized throughout. (American Psychological Association, 1947)

Beginning in 1948, the APA started to accredit doctoral training programs in clinical psychology. Shakow’s committee had specified that accredited programs were to be site-visited every five years by two or more psychologists who would evaluate the training program.

In 1949, the National Institute of Mental Health funded a conference on graduate training in Boulder, Colorado. The APA was represented at the conference, which was also attended by representatives from the university doctoral training programs in clinical psychology, internship training sites, and some practicum agencies. After two weeks, the Boul-
der conference attendees essentially reaffirmed the recommendations described in the Shakow report. Probably of greatest importance to the field was the endorsement the clinical psychologist as both a scientist and a practitioner. The following training principles were included in the conference report: (1) Clinical psychologists were to be trained at university psychology departments; (2) they were to be trained as scientists first and clinicians second; (3) they should be required to complete a one-year internship of full-time clinical work; (4) they should be trained in diagnosis, research, and therapy; and (5) they should be required to complete original research making a contribution to the field and culminating in the Ph.D.

The scientist-practitioner model of training was recognized as a unique experiment by the Boulder conference participants. In most disciplines, graduate training is geared toward practice or research, but not both. In medicine, for example, students learn facts about anatomy, physiology, biochemistry, and the like, and how to diagnose and treat illnesses. They do not learn how to—nor are they expected to—carry out research to contribute to the knowledge base in these areas. In Boulder model training, on the other hand, participants develop the skills to apply psychological knowledge (e.g., diagnose and treat) but also to contribute to that knowledge base.

The years immediately preceding and following the Boulder conference were years of incredible growth for training in clinical psychology. Grant money was available from the USPHS graduate training programs and hundreds of funded internships at VA facilities were created. The GI bill was amended to include graduate education, so that psychology programs were inundated with applications from veterans who brought with them their own funding (Baker & Benjamin, 2000). Consequently, the number of graduate training programs in clinical psychology grew. In 1947, there were twenty-two universities offering doctoral training in clinical psychology in the United States. Two years later, in 1949, that number had grown to forty-two (Reisman, 1991). Still, these programs continued to receive far more applicants then they could possibly train. Training directors were in a position to be able to choose the best and brightest from their large pools of applicants.

Growth in clinical training grew through the 1950s and 1960s. Starting in the late 1940s, the National Institute of Mental Health began making training grants available to university psychology programs. These grants provided support for teaching costs and graduate assistantships. The goals of the program were to support the creation of new graduate programs and to improve the quality of existing programs. By 1962, there were 60 APA-accredited graduate training programs in clinical psychology, 55 of which were supported by NIMH training grants (Brems et al., 1991).

Looking back in time, the years immediately following World War II can be seen as a period of striking optimism about clinical psychology. There was abundant support for training of clinical psychologists and for clinical research. The rapid growth of clinical psychology was by and large a U.S. phenomenon. Some numbers illustrate the point. By 1968, there were approximately 12,000 psychologists in the United States who identified themselves as clinicians (Cates, 1970, cited in Reisman, 1991). By comparison, around the same period of time, it was estimated that there were 2 in Bulgaria, 76 in Finland, 134 in Denmark, 14 in Ireland, 183 in Norway (Bard, 1966, cited in Reisman, 1991), 94 in Rumania, 253 in Sweden, 345 in Great Britain, 60 in Yugoslavia, and about 30 in Greece (Vassiliou & Vassiliou, 1966, cited in Reisman, 1991).
In the United States, the field had captured the public’s interest and there were unprecedented numbers of applicants to training programs. By 1950 clinical psychology had established itself as a scientific and professional discipline.

Adulthood: Milestones and Growing Pains

The fifty-plus years since the Boulder conference have witnessed continued growth and change for clinical psychology. In the following pages we highlight some of the important controversies and developments in the field. Taking the year 1950 as a rough jumping-off point, we trace developments up to the present in the following areas: training, psychotherapy, psychological testing, professional practice, specialization, and growth.

Training

The conference in Boulder, Colorado, was not the last time a group of interested psychologists gathered to discuss the training of clinical psychologists. These conferences (like Boulder, named for their locations) provided proponents and detractors of the scientist practitioner model forums to air their views. The first conference in which an alternative to the Boulder model was formally proposed was held in Miami Beach in 1958. Although the participants in the Miami Beach meeting continued to support Boulder model training, they encouraged exploration of alternatives, including masters-level training and professional training that would culminate in a Doctorate of Psychology (Psy.D.).

Perhaps reflective of the rebellious times, in the 1960s there was growing discontent with scientist-practitioner training among a vocal group of clinical psychologists. While university faculty tended to support the Boulder model, students and practitioners were more critical. They complained that too much time and effort was spent developing research skills that most graduates never used after receiving their Ph.D.s and that too little time and effort was devoted to clinical training. In addition, many practitioners did not like the skeptical atmosphere in which clinical methods were taught. Student felt pulled in different directions when they reviewed scholarly material critical of the very assessment and intervention strategies they were learning to apply in clinical practica. In addition, students were frustrated by the length of typical Ph.D. training programs. It was not unusual for students to take seven or more years to complete the Ph.D., often due to delays in completing the doctoral dissertation. There was a cry for alternative approaches to training.

In 1968 the University of Illinois, which already had a respected Ph.D. program in clinical psychology, initiated a Psy.D. program that deemphasized research and required more training in clinical assessment and treatment methods relative to the Ph.D. program. Another alternative was the start of the professional schools of psychology. The first professional school, the California School of Professional Psychology, was founded in 1969.

In 1974, another training conference was held, this time in Vail, Colorado. The Vail conference produced a series of recommendations for loosening the regulations that govern the training of clinical psychologists. The Vail attendees endorsed the Psy.D. as a legitimate alternative to traditional Ph.D. training. Second, whether training culminated in a Ph.D. or Psy.D., the scholar-practitioner model (see Chapter 1) was also endorsed as an alternative
to the scientist-practitioner model. Finally, in the anti-intellectual spirit that was popular toward the end of the 1960s and in the early 1970s, the Vail conferes proposed that masters-level training should qualify individuals to use the title psychologist.

Clearly, the emphasis of the Vail conference was toward a liberalizing of training. Some of what came out of the Vail conference was eventually accepted by the APA and influenced the criteria for program accreditation (e.g., scholar-practitioner training and the Psy.D.) but most of the other recommendations fell flat. Most notably, the APA continued to promote the idea that doctoral-level training was a prerequisite for use of the title psychologist and, in fact, recommended the abolition of terminal masters programs in clinical psychology.

The next major conference on training clinical psychologists took place in Salt Lake City, Utah, in 1987. While the proceedings of the Utah conference included an acknowledgment of the legitimacy of the Psy.D., they also emphasized the importance of training in research for every clinical psychologist (Bickman, 1987). The Utah conferes called for greater diversity in clinical psychology training with respect to gender, age, race, and sexual preference. Finally, the most controversial recommendation was that by 1995, all professional schools should be affiliated with a regionally accredited university. The latter recommendation was not accepted by the APA’s office of accreditation.

As mentioned in Chapter 1, a more recent development has been the self-identification of so-called clinical scientist training programs (McFall, 1991). Clinical scientist training puts the emphasis back upon research. Students in a clinical-scientist program are taught to apply scientific standards to evaluate clinical methods and to apply only those methods for which there is significant scientific support. More importantly, clinical scientist training teaches students to evaluate their own clinical work scientifically and to contribute to the clinical science literature.

Psychotherapy

In the early adulthood of clinical psychology, psychoanalysis and psychoanalytically oriented therapies were dominant. In psychoanalytic circles, “controversial” modifications to traditional psychoanalytic techniques, such as having the patient sit in a chair rather than lie on a couch and seeing patients less often than daily, were hotly debated. But outside of psychoanalytic circles, major paradigm shifts in the way that psychotherapy was conceptualized and carried out were occurring. Theories of personality and psychotherapy that did not rely upon the unconscious were developed and promoted by mavericks such as Carl Rogers, Joseph Wolpe, Albert Ellis, Aaron Beck, and others.

In his 1951 book, Client-Centered Therapy, Carl Rogers (1902–1987) eschewed the need for interpretation of unconscious drives and motives in psychotherapy. In fact, he argued against the need for interpretation altogether. Rogers saw the role of the psychotherapist to be understanding the world as the client experienced it and communicating that understanding to the client. Rogers believed that all human beings have the capacity to grow and move toward self-actualization, “the inherent tendency of the organism to develop all its capacities in ways which serve to maintain or enhance the organism” (Rogers, 1959, p. 196). In client-centered psychotherapy, the therapist creates circumstances that allow the client to shed conditions of worth (internalized beliefs about standards one must achieve to be loved
and valued) and release his or her capacity for personal growth. Rogers was a pioneer, not only in his thinking about psychotherapy, but also in being one of the first to test his ideas through empirical investigation. Rogers made recordings of his therapy sessions so that they could be studied, a practice unheard of at the time and shocking to traditional psychoanalysts. Rogers proposed his ideas about the psychotherapy conditions that are necessary for change as hypotheses to be tested and set about testing them. Consequently, Rogers initiated a new era of psychotherapy research.

Around the same time that Rogers was developing and testing his ideas about psychotherapy, the first generation of modern behavior therapists were developing a whole different approach to understanding and treating emotional and behavioral disorders. Behavior therapy involved the application of principles of classical and operant conditioning to clinical disorders. Joseph Wolpe was a behavior therapy trailblazer. Trained in psychoanalysis, Wolpe was frustrated with the disappointing results he achieved applying psychoanalytic procedures with traumatized veterans of World War II. He searched for an alternative and found it in the literature on experimental neurosis, a condition marked by anxious behavior in laboratory animals exposed to certain learning procedures. Drawing upon this literature, Wolpe conducted his own laboratory experiments in which he demonstrated that anxiety in cats, conditioned for experimental neurosis, could be overcome by eliciting a response incompatible with anxiety while presenting them with anxiety-provoking stimuli. In his 1958 book, Wolpe proposed the concept of reciprocal inhibition as a principle of behavior change that relied upon countering anxiety by a competing feeling state (Thorpe & Olson, 1997). Wolpe developed the psychotherapy technique systematic desensitization based upon the principle of reciprocal inhibition (see Chapter 13).

In addition to Wolpe, other pioneers of the behavior therapy movement included Hans Eysenck (1916–1997) in England and B. F. Skinner (1904–1990) in the United States. Eysenck and his colleague Monte Shapiro developed the first graduate program in clinical psychology in Great Britain. Eysenck was discouraged by the wide gulf between psychology and what students were being taught in clinical training programs (primarily psychoanalytic approaches to assessment and therapy) in U.S. training programs he visited. He and Shapiro created their program to train students in a scientifically oriented clinical psychology (Thorpe & Olson, 1997). Although it had not yet been named, much of the early work done by Eysenck and his students came to be known as behavior therapy. B. F. Skinner demonstrated that the behavior of laboratory animals could be modified by controlling the consequences of specific responses. In an elegant series of studies using standardized learning environments, Skinner articulated the principles of operant conditioning. Applying these principles to chronic psychiatric patients on a hospital ward, Skinner demonstrated that these patients showed the expected learning patterns when the consequences of their behavior were controlled (Thorpe & Olson, 1997). Following from Skinner’s lead, other clinical researchers developed therapy techniques, including the token economy (Ayllon & Azrin, 1968) and various child behavior management strategies (e.g., Bijou & Baer, 1966), by applying operant conditioning principles.

While it was derided by some of its critics as being too symptom-focused, thus ignoring the supposed root causes of clients’ problems, behavior therapy continued to expand and grow throughout the 1960s and 1970s. The development of behavior therapy was spurred by a commitment to empirically evaluating behavioral interventions. Consequently, an immense
empirical literature examining specific behavior therapy techniques grew. By the end of the 1970s, systematic desensitization, for example, represented the most intensely researched psychological intervention ever developed (Wilson & O’Leary, 1980). Behavior therapy researchers, such as Gordon Paul and Isaac Marks, have continually set the standard for psychotherapy outcome research.

Behavior therapy has expanded dramatically since the early pioneers applied learning principles to alleviate human suffering. This growth has included an expansion beyond the application of classical and operant conditioning to include cognitive learning. Cognitive-behavior therapy is the term now favored by many to describe this approach to psychotherapy. The two most influential early developers of cognitive behavior therapy were Albert Ellis (b. 1912) and Aaron Beck (b. 1921). Ellis was a clinical psychologist and prolific writer, researcher, and clinician (see Ellis, 1991, for a humble autobiography of his life in clinical psychology) who first described his ideas about cognitive behavior therapy in the 1950s. Through his clinical work, Ellis noticed that his clients tended to hold beliefs and think in ways that contributed to their emotional distress. Ellis developed an approach to therapy (rational emotive behavior therapy) in which he very directly educated his clients about how their beliefs contributed to their problems. Like Ellis, Aaron Beck began developing his cognitive therapy for depression in the 1950s. Although developed independently, Beck’s cognitive therapy shares some features with rational emotive behavior therapy. Like Ellis, Beck advocated rationally challenging clients’ irrational beliefs. But he also suggested that therapists and clients work together to develop experiments to test out the clients’ beliefs. Beck’s cognitive therapy uses empathic questioning to challenge clients’ beliefs.

Cognitive behavior therapy has steadily grown in popularity since it was first described almost 50 years ago. Currently, about half of the licensed psychologists who are members of APA define their orientation as cognitive-behavioral or behavioral (Resnick, 1997). Cognitive behavioral approaches have been tested empirically and have been shown to be helpful for a variety of clinical problems (see Chapter 13). Using the number of related articles published in the major journals (e.g., Journal of Consulting and Clinical Psychology, Clinical Psychology: Science and Practice) as the measure of an approach’s standing in the field, cognitive-behavior therapy appears to be the dominant approach to psychotherapy in clinical psychology at the present time.

Psychodynamic therapies, client-centered and other so-called humanistic therapies, behavior therapy, and cognitive-behavior therapy represent major approaches to psychotherapy, but clearly not all therapies can be fit neatly into one of these four areas. Starting in the 1960s, the number and types of psychotherapies has proliferated. In 1979, Larry Beutler published a survey of the field in which he concluded that there were over 130 types of psychotherapy. By the mid-1980s estimates of the number of therapies had grown to over 400 (Karus, 1985, cited in Kazdin, 1994). The growth in the types of psychotherapy practiced was matched by a growth in the number of clinical psychologists choosing psychotherapy practice as their primary form of employment (see Chapter 1, Table 1.2).

For its first fifty years, clinical psychology was identified with psychological testing. Over its second fifty years, the field has redefined itself as one most strongly associated with psychotherapy. As we saw in Chapter 1, no matter what their work setting, most contemporary clinical psychologists spend some portion of their time conducting psychotherapy.
Psychological Testing

Psychological tests developed in the 1920s and 1930s have proven to be remarkably enduring in terms of their popularity among clinical psychologists. In the 1950s, the Rorschach, Stanford-Binet, Wechsler-Bellevue, TAT, and the MMPI were the instruments most often used by clinicians and most frequently studied by clinical researchers. By 1951, there were 1,219 publications dealing with the Rorschach, 493 regarding the Stanford-Binet, and 371 on the Wechsler-Bellevue (Sunberg, 1954, 1961, cited in Reisman, 1991). In retrospect, the 1940s and 1950s can be seen as the heyday of psychological testing. Clinical psychologists were applying psychological tests in a variety of settings and for a wide variety of purposes. Tests were used to make diagnostic, treatment, placement, and educational decisions. Although not without critics, as a discipline, clinical psychology had faith in the value of psychological testing.

The 1960s, however, was a period during which questioning “authority” and rebellion against “the establishment” was the norm. It is perhaps not surprising then that the 1960s witnessed the beginning of a strong backlash against psychological testing. A 1965 special issue of American Psychologist was devoted to criticism of psychological testing and papers in its defense. Criticism of testing came from a variety of perspectives. Many pointed out the poor reliability and validity of many psychological tests, particularly projective tests (e.g., Rabin & Hurley, 1964). Behavior therapists had little use for instruments designed to measure unconscious conflicts, defense mechanisms, or personality traits. They advocated for direct observation of behaviors of interest and functional analysis (see Chapter 9). Humanists such as Rogers did not see the need for constructs such as psychiatric diagnoses, the unconscious mind, or stable personality traits. Testing, therefore, was of minimal importance to the client-centered therapist.

Projective personality tests such as the Rorschach and TAT have been the victims of particularly scathing attacks. By the late 1950s, in fact, several reviews of the literature had appeared that were highly critical of projective tests. For example, Jensen (1959) wrote, “No general conclusion concerning reliability is possible even with respect to any particular techniques. The reported reliabilities are usually lower than is considered acceptable in the case of objective tests” (p. 133). And Eysenck (1958) weighed in as well: “There is no satisfactory evidence for any of the numerous claims made for these devices” (p. 120). In 1978, Peterson reviewed the literature on the Rorschach and concluded that the data did not justify its use in clinical practice. In a 1965 review of the TAT, Zubin, Eron, and Shumer (1965) concluded, “It is not possible to regard the TAT as a valid instrument of personality assessment, as such” (p. 462). A similarly negative conclusion about the TAT was reached by Swartz (1978) thirteen years later. In 2000, the authors of a comprehensive review of projective techniques concluded that while there was some support for the validity of a few of the indexes derived from the TAT and Rorschach, the instruments are routinely used for purposes for which they are invalid or for which there is little research support (Lilienfield, Wood, & Garb, 2000).

Intellectual testing has also been virulently attacked from a variety of quarters. Once again, these attacks first appeared in the 1960s, at which time it was discovered that certain minority groups scored, on average, about one standard deviation lower on IQ tests than white children and adults. This finding led to intense scrutiny of IQ tests and a variety of criticisms.
It was discovered that many tests did not include minority groups in their standardization samples and that test items often reflected white, middle-class values and sampled a narrow range of abilities. In addition, some critics thought that the tests were being used to segregate minority children from whites in educational settings and to discriminate against minorities in the employment arena. The APA responded to the mounting criticism of intelligence testing in a special report issued to its members (Cleary, Humphreys, Kendrick, & Wesman, 1975). The authors of the report summarized the evidence, which showed that black children, on average, scored about 15 points below white children on IQ tests across school years. However, the report argued that this did not justify segregation of children along racial lines, nor should it be taken as evidence or genetic differences between the races. Despite the committee’s efforts to strike a conciliatory tone, the report was met with criticism by some minority groups. Speaking for minority psychologists, one black psychologist wrote, “Psychological testing historically has been a quasi-scientific tool in the perpetuation of racism...it has provided a cesspool of...fallacious data which inflates the egos of whites by demeaning Black people and threatens to potentiate Black genocide” (Jackson, 1975, quoted in Reisman, 1991, p. 342).

Despite the criticisms psychological tests have faced over the past forty-plus years, the number of published tests continues to grow. What then has been the consequence of all the scrutiny of, and commentary about, psychological testing? It appears that the testing enterprise has improved in a variety of ways: (1) The standards for normative data have increased substantially. Contemporary psychological tests need to show that they include adequate representation of the subgroups that make up the population to which findings are to be generalized. A test of general intelligence, for example, must have normative data on a sample of people who approximate the distribution of races in the United States. (2) In addition to representativeness in norm sampling, most contemporary psychological tests strive to be inclusive in item content as well. For example, pictures used in test items include images of non-white people. (3) Perhaps one of the most significant consequences of the critical attention paid to tests of intelligence and personality has been the proliferation of specific tests designed to measure specific attributes. Thousands of tests designed to measure specific emotions (e.g., anxiety, depression, anger), personal characteristics (e.g., assertiveness, parenting confidence), cognitive skills (e.g., short-term memory, nonverbal problem solving), academic achievement (e.g., reading comprehension, mathematical computations), and many other attributes have been developed. (4) Popular tests are periodically revised and the new editions attempt to address the problems identified in the earlier versions. Notably, in the 1970s John Exner undertook to develop a uniform system for administering, scoring, and interpreting the Rorschach that could be used reliably (see Chapter 8). The Wechsler scales of intelligence have also been periodically updated, as have major tests of academic achievement. A major revision of the MMPI was finally published in 1989. (5) Finally, test developers have taken some steps to minimize the misuse of psychological test data. For example, the 1986 revision of the Stanford-Binet scale dropped the use of the term “IQ” in favor of a standard age score that, hopefully, more accurately reflects what the score is (i.e., an appraisal of how someone is functioning relative to age-matched peers, not a measure of innate intellectual ability).

Ironically, the strong backlash against psychological testing that began in the late 1950s and continued though the 1980s has not been accompanied by a decrease in the popularity
of psychological testing. While this period of time did witness a decline in the amount of
time clinical psychologists spent in psychological testing (in 1959 it was estimated that
clinical psychologists spent 44 percent of their time on diagnosis and assessment, but by
1976 that estimate had dropped to 24 percent; Reisman, 1991), the decline was more likely
due to psychologists’ increasing involvement in psychotherapy. The continued popularity of
some psychological tests, particularly projective tests, has baffled many observers. In 1982,
Anne Anastasi summarized the apparent paradox succinctly: “Projective techniques present
a curious discrepancy between research and practice. When evaluated as psychometric
instruments, the large majority make a poor showing. Yet their popularity in clinical use con-
tinues unabated” (p. 564). As we commented at the beginning of this section, succeeding
generations of clinical psychologists have shown a striking loyalty to some of the earliest
tests developed. A survey conducted in the mid-1980s found that the top ten most frequently
used tests by psychologists included the MMPI, WAIS, Rorschach, TAT, and projective
drawing techniques (Lubin, Larsen, Matarazzo, & Seever, 1985). Ten years later, Watkins,
Campbell, Nieberding, and Hallmark (1995) found the list to be essentially unchanged.

Professional Practice

Over clinical psychology’s first fifty years, there was a small but slowly growing number
of psychologists who offered their services for a fee. After World War II, the number of
psychologists interested in professional practice expanded rapidly. Clinical psychology’s
adulthood has witnessed a continued expansion of professional practice. Through the years,
professional psychologists have had to fight for recognition of their services and to expand
their position in the professional marketplace.

A significant milestone in the development of any profession is the legal recognition
that the profession, in fact, exists. For psychology, the battle for legal recognition was fought
over a thirty-five-year period. To understand psychology’s struggle for legal recognition, it
is important to understand a bit about the way licensing and certification laws work. A licensing
law restricts the performance of certain functions to individuals who are recognized
members of that profession (e.g., only people holding certain professional licenses can
legally write orders for prescription medications). A certification law, on the other hand, controls only the use of a title. For certification an individual must meet certain standards
specified by statute. Only those individuals who have demonstrated that they meet those
requirements can use the title protected by certification (e.g., psychologist). Another impor-
tant thing to know about licensing is that professional licenses are issued by states. There
is no federal license to practice psychology. Each state sets its own standard for licensure
or certification.

The first certification law for psychologists went into effect in Connecticut in 1945. The law required that those wishing to use the title psychologist have a Ph.D. and one year
of professional experience. Many other states sought to follow Connecticut’s example in the
late 1940s and 1950s. But certification and licensing legislation ran into tough resistance
from the medical community in some states. The American Medical Association actively
opposed licensing laws, conceding that certification may be acceptable, because physicians
wished to prevent psychologists from practicing psychotherapy (Gerty, Holloway, &
MacKay, 1952). Psychiatry acknowledged that some psychologists might be able to perform
therapy under supervision in a medical setting, but warned that the public would be harmed if psychologists were allowed to provide psychotherapy in private practice.

Despite resistance from organized medicine, psychologists won a series of battles in state legislatures to obtain certification and licensing laws in the 1950s. During that decade Kentucky, Minnesota, New York, Maine, Washington, California, Florida, New Hampshire, and Maryland all passed certification laws, and Georgia and Tennessee passed licensure laws. In the subsequent two decades all states eventually passed either certification or licensing laws and many states were able to change the language of their laws from certification to licensure. In 1980, Missouri became the last state to license psychologists.

The passage of licensing laws was an important stepping stone for professional psychology, paving the way for other legal victories. Perhaps one of the most important was psychologists’ fight to obtain payment for their services from medical insurers. In the 1970s, psychologists won important legal suits against insurance companies (e.g., *Blueshield of Virginia v. McCready* and *Wyatt v. Strickney*). In these cases, the courts held that patients should have the freedom to choose among mental health professionals who provided the same services (e.g., psychotherapy). Therefore, other mental health professionals, in addition to psychiatrists, should be eligible for third-party payment for their services. The fight for access to third-party payors continued through the 1980s. However, by the close of that decade clinical psychologists could receive reimbursement for their services from all the major insurance providers, including the federal programs (e.g., Medicaid, Medicare).

Another area in which psychologists have fought for and won expanded practice opportunities has been gaining so-called hospital privileges. This means that psychologists in many states can admit a patient to a hospital and provide treatment to the patient while he or she is hospitalized without arranging for supervision from a physician. Once again, it was organized medicine, most strongly psychiatry, that fought against hospital privileges for psychologists. In 1990 an important legal case was settled in California (*CAPP v. Rank*) that upheld psychologists’ rights to hospital privileges. Currently, about fifteen states have passed legislation allowing psychologists hospital privileges.

The battles won in the 1970s and 1980s created unprecedented opportunities for psychologists in private practice. These opportunities, along with the unbridled expansion of training programs (see Robiner, 1991), resulted in spectacular growth in private-practice psychologists. In 1974 there were 20,000 psychologists licensed to practice. By 1990, that number had increased to 63,000—a 300 percent increase over fifteen years (Shapiro & Wiggins, 1994). Since the early 1990s, however, the unprecedented growth in opportunities for private practice psychologists has slowed due to changes in the way health care is delivered and paid for in the United States.

The health-care system in the United States was traditionally set up as a fee-for-service system. That is, a service (e.g., setting a broken bone) cost a certain amount (determined by the provider) and the patient receiving the service paid for it. People bought health insurance, or the insurance was provided by an employer or the government, to cover all or some portion of the services provided. The insurer would pay the actual cost of the service. Psychologists providing psychotherapy services, for example, charged their clients for the service (e.g., $90 for one hour of psychotherapy). Insured clients either paid the psychologist directly and then submitted their receipts to the insurance company for reimbursement, or paid the psychologists a portion of the fee and the psychologists billed the insurance company...
directly for the rest. Under this system, the health-care providers set their fees and determined what treatments were needed. Under this system, psychologists had maximum autonomy.

The fee-for-service system was good for health-care providers and good for most patients. Unfortunately, it was also extremely expensive and the rate of increase in health-care costs far outstripped the rate of inflation. For example, in 1954 health-care expenditure in the United States was about $12.7 billion, or about 4.4 percent of the gross national product (GNP). By 1994, expenditure on health care had reached $1 trillion, or about 13 percent of the GNP (McGrew, Glogueauf, Bond, & Frank, 1996). Concern about this growth led to calls for reform of the health-care system. While the government was not successful in reforming the way health care is delivered in the United States, the health-care insurance industry has reformed the way health care is reimbursed. The changes brought by the insurance industry have dramatically changed the way psychologists practice. In 1985, 80 percent of health-care plans were traditional fee-for-service; by 1995 only 20 percent followed the traditional model (Resnick, 1997).

Most private-practice psychologists now work within some form of managed care. Managed care refers to a variety of systems within which health-care providers provide services that are overseen (or managed) by the third-party payer or a company hired by the insurance company (for a more thorough discussion of the definition of managed health care see Bobbit, Marques, & Trout, 1998). In a prototypical managed-care system, psychologists must have their credentials reviewed by the managed-care company in order to be designated as a provider. The psychologist contracts with the managed-care company to provide services to people whose insurance benefits are managed by that company. The fee for specific services is set by the managed-care company, as is the number of sessions for which the psychologist will be reimbursed. Psychologists seeing clients for psychotherapy must have their treatment plans approved by the managed-care company. The number of psychotherapy session for which the client has approval is set. If the psychologist believes that additional sessions are necessary, he or she must petition the managed-care company for approval.

As you might have guessed, clinical psychologists bristle under managed-care systems and for most private practice psychologists, managed care is a four-letter word. Several surveys have found that most practicing psychologists feel that managed care has had a negative impact upon their work (Phelps, 1996; Tucker & Lubin, 1994). Psychologists’ complaints are many (see, for example, Austad, Hunter, & Morgan, 1998). Concerns about the continuity of care have been expressed by many psychologists, including the ethical dilemma they face when the managed-care company refuses to approve services deemed necessary by the clinician. Others have voiced concern about the intrusion of the managed-care company into the psychotherapy relationship (Fox, 1995). Therapists must share personal information about their clients in order to obtain approval for services. Managed care clearly favors short-term psychotherapy over traditional long-term insight-oriented psychotherapy, which upsets proponents of the latter (Pipal, 1995). Within managed health care, practice guidelines are used to evaluate the appropriateness of clinicians’ treatment plans. Some critics of practice guidelines have argued that these limit the autonomy and stifle the creativity of clinicians. Others have argued that practice guidelines are often determined by political forces rather than scientific evidence (Jacobson & Hollon, 1996). Finally, many psychologists complain of being swamped by paperwork created by the managed-care system. There are
lengthy applications to be designated as a provider, treatment plans for each new client, and forms for requesting additional sessions.

In the short term, the impact that the managed-care revolution has had on psychological practice has been profound. Many psychologists are leaving private practice and seeking other avenues of employment. Others are shifting the focus of their practices to areas such as forensic psychology, neuropsychology, or business consultation in order to escape the burden managed care has placed upon psychotherapy practice. Still others are limiting their psychotherapy practices only to those clients who can afford to pay for therapy themselves.

By and large, professional psychology has taken an adversarial stance against managed care (e.g., Fox, 1995). Some psychologists have brought suit against managed-care companies, as have some clients who believe they were denied services unfairly. If successful, these types of suits may limit the intrusiveness of some managed-care practices but are not likely to make the beast go away. Several commentators have warned that psychologists need to learn to play ball within the managed-care environment or get out of the game. They argue for the acceptance of managed care as a reality (Kiesler & Morton, 1988; Hayes, 1996). However, rather than forecast the consequent destruction of professional psychology, some see in managed care exciting opportunities for scientifically minded psychologists (e.g., Hayes, 1996; Strosahl, 1994). Managed care forces practitioners to justify their treatment plans and to demonstrate that what they do is effective. Managed care has spurred the identification and use of treatments that have empirical support (Barlow, 1996; Rehm, 1997). The long-term impact managed care will have upon professional psychology has yet to be determined.

**Specialization**

The first generations of clinical psychologists were considered to be trained in the specialty area of clinical psychology after completing their doctoral degrees (Wiens, 1993). As specialists, one might expect that clinical psychologists would have mastery of the knowledge in their discipline. It is self-evident, however, that with the rapid growth of the discipline no one person can truly master all of the knowledge in clinical psychology. By the close of the 1980s, APA’s Division of Clinical Psychology and the Council of University Directors of Clinical Psychology proposed that clinical psychology is a field rather than a discipline (Resnick, 1991). While this change in definition might seem a trivial semantic exercise, it acknowledged the growing need for specialization for professional practice as well as scholarly research. With the new definition, training in clinical psychology is viewed as laying the foundation upon which mastery of specialty knowledge is built.

Evidence for the specialization of clinical psychology can be seen in the professional organizations representing the field. The growing number of divisions within APA attests to the increasing specialization of the field. There are currently 53 divisions, fully 20 of which are clearly related to clinical psychology (e.g., 22, Rehabilitation Psychology; 29, Psychotherapy; 40, Clinical Neuropsychology; 53, Clinical Child Psychology). Division 12 (Division of Clinical) was formed to give clinical psychologists a professional home within APA. The increased diversity of clinical psychology is evident in the current organization of Division 12. Renamed the Society of Clinical Psychology in 1999, the division currently has six sections for clinical psychologists who share various interests (see Table 2.2). The
The trend toward increased specialization within clinical psychology is likely to continue and will place strain upon the discipline. Some graduate programs already offer doctoral-level training with emphasis upon one or more areas of specialization such as health psychology, clinical neuropsychology, or forensic psychology. Some observers of the field see specialization as more appropriately conducted after the doctorate has been earned through designated post-doctoral training programs (Wiens, 1993). This model is more akin to traditional training of physicians who obtain their medical degrees over four years of general training and only specialize after receiving their M.D. In addition to implications for training, there are several other issues that increasing specialization is presenting to the field: (1) As the number of clinical psychologists aligning themselves with specific specialty areas increases, the connections between the specialty and the broader field are likely to fray. (2) Practice issues will need to be worked out as well. For example, will only those clinical psychologists who seek certification in clinical neuropsychology be allowed to conduct neuropsychological evaluations, or will clinical psychologists with adequate training in neuropsychological assessment still be able to do this type of work without certification in neuropsychology? (3) Will the standard of care for psychologists who specialize be higher than that of generally trained psychologists? Regardless of whether psychologists seek certification in specialty areas, in contemporary clinical practice all psychologists must define their areas of competence. It is no longer acceptable to view oneself as a general clinical psychologist who is competent to work with any problem that comes through the door.

**Growth**

In the first decade of the twenty-first century, most Americans probably equate psychology with clinical psychology. Many college students taking their first introduction to psychology course are surprised to hear the field defined as a scientific discipline and disappointed that the course includes minimal coverage of counseling or psychotherapy. This association of the broader field with clinical psychology is not surprising, given that for many people their only exposure to psychology is through the mass media. But the association of psychol-
ogy with clinical psychology cannot be blamed entirely on the media. The reality is that in
the United States, clinical psychology has grown to become the largest discipline within psy-
chology and one of the largest providers of mental health services.

One indicator of the growth of clinical psychology is the increase in number of train-
ing opportunities available for students interested in the field. In 1969 there were 70 APA-
approved doctoral training programs. By 1979 there were over 100. In 1989 the number had
grown to 157 and by 1999 there were over 200 (including programs offering combined
training in clinical/counseling or clinical/school). The number of non-APA-accredited pro-
grams is harder to estimate, but there are substantial numbers of these as well. For exam-
ple in 1989, there were 45 professional programs in clinical psychology, of which only 22
were APA accredited (Reisman, 1991). Many of these nonaccredited programs produce large
graduating classes annually. While prior to 1940 over 70 percent of Ph.D.s in psychology
were in the experimental area, by the mid-1980s over 50 percent of the doctoral degrees in
psychology were awarded in clinical and that percentage has continued to grow (Reisman,

The ascendance of clinical psychology can also be seen in the makeup and governance
of the APA. In 1999, over 50 percent of APA members identified themselves as clinical
psychologists. The APA, which at the turn of the twentieth century was a small organization
of academic psychologists that required proof of scholarly work for membership, had, by
the turn of the twenty-first century, become a professional guild that devotes a large portion
of its resources to supporting the practice of psychology. Although APA continues to sup-
port scientific psychology (e.g., its journals are among the best in any area of psychology),
during the second half of the organization’s life it has been increasingly dominated by clin-
ical interests. Clearly reflective of this shift toward clinical psychology is the background
of the APA presidents. In the 1980s five of the ten APA presidents were clinical psycholo-
gists. Of the ten people who served as president in the 1990s, nine were clinical psychologists
and the tenth, Frank Farley, had published in a variety of areas, including clinical. Perhaps
even more indicative of the change in the organization was the election of the first non-
Ph.D. psychologist to the presidency of APA. Dorothy Cantor, Psy.D., served as the organi-
zation’s president in 1996.

Understandably, the shift in APA priorities toward practice left many academic and
research psychologists feeling alienated. Numerous psychologists who viewed themselves
as “pure” scientists felt alienated in APA. In 1988, a plan to reorganize APA was put to a
vote. The plan called for a restructuring into separate assemblies of academic and nonaca-
demic psychologists. It was hoped that by separating the organization into two bodies with
different dues, it would address the concerns of academic psychologists who resented hav-
ing their dues used to promote practice issues. The reorganization plan was rejected by the
membership and immediately thereafter a group of psychologists interested in an organi-
zation devoted exclusively to scientific psychology formed the American Psychological
Society (APS). The founding members of APS consisted of 22 former APA presidents and
about 400 other distinguished scientific psychologists. Formed in August 1988, within six
months APS had 5,000 members. By 2001, membership had reached about 15,000.

APS does not limit membership to psychologists holding academic positions, nor does
it exclude APA members. The society’s mission is “To promote, protect, and advance the
interests of scientifically oriented psychology in research, application, and improvement of
BOX 2.2

Focus on Ethics: The APA Ethics Code

The explication of a code of ethics is a milestone in the development of any profession. A code of ethical standards is an implied social contract between the profession and the public (Koocher & Keith-Spiegel, 1998). The stated objectives of the ethics codes of most professions share similar themes: to promote welfare and avoid exploitation of consumers, to maintain competence and act responsibly, and to uphold the integrity of the profession. In practice, ethics codes function to protect the public and to protect the profession. The former is usually explicitly stated but the latter is often the primary motivator behind the development of ethical guidelines. Fortunately, in most cases, ethical standards usually serve both functions simultaneously. By protecting the public against unscrupulous behavior by its members, a profession also protects its credibility. The following history of the American Psychological Association’s ethics code is adapted from Canter, Bennett, Jones, and Nagy (1994).

Although the American Psychological Association did not create its first ethics code until 1952, it created its first committee for dealing with ethical issues in 1938. The Committee on Scientific and Professional Ethics (CSPE) was formed that year and one of its recommendations was that the association create a continuing committee (the CSPE was a temporary entity) to “investigate complaints of unethical conduct... and to formulate from time to time rules or principles of ethics for adoption by the Association” (Olson, 1940, p.721, cited in Canter et al., 1994). For over ten years the committee advised members and dealt with ethical complaints without any authoritative set of principles to guide it.

The first Committee on the Ethical Standards for Psychologists was formed in 1947 and was chaired by the eminent learning theorist Edward C. Tolman. True to psychology’s principles as an empirical science, the committee gathered data from the APA membership (there were about 7,500 members at that time) on ethical situations and dilemmas. They collected over 1,000 responses to their request for members “to describe a situation they knew of first-hand, in which a psychologist made a decision having ethical implications, and to indicate... the ethical issues involved” (APA, 1953, p. vi, cited in Canter et al., 1994). Using this “critical-incident” method, the committee derived a set of ethical principles that was adopted by the organization in 1952 and published in 1953. The original document was 171 pages and included 162 “principles” and 148 “subprinciples,” each of which was accompanied by an example ethical situation from the membership survey. Fortunately, a 19-page summary version was also published, Ethical Standards of Psychologists: A Summary of Ethical Principles (APA, 1953).

The APA ethical principles have gone through numerous revisions since the 1953 version. Revisions were adopted in 1958, 1962, 1965, 1972, 1977, 1979, 1981, 1989, 1992, and 2002. Some of these have been substantial modifications to their predecessors, while others represented relatively minor modifications. Why so many revisions? Many factors have created pressure to revise the ethics code: (1) The profession continues to grow and change and the code needs to change to accommodate new developments; (2) as committees apply the ethics code, they discover its flaws and weaknesses; and (3) legal challenges to the code have forced the profession to make certain modifications.

The most severe sanction that the APA can deliver against one of its members for violating the ethics code is expulsion from the organization. But membership in the American Psychological Association is voluntary and not required for the practice of psychology. Violation of the ethics code, however, can result in penalties much more severe than expulsion from APA. State licensing boards, state psychological associations, and other organizations have adopted the code. And violation of the ethics code can be used against psychologists in malpractice cases.
When the ethics code is used in legal proceedings, it is often scrutinized with particular care. In one legal case brought against a state licensing board (White v. the North Carolina State Board of Examiners of Practicing Psychologists), for example, the court ruled that the language in parts of APA’s ethics code was too vague to be used to determine that a specific violation had occurred.

Each successive version of the Ethics Code was intended to avoid, or at least minimize, some of the problems encountered implementing its predecessor. For example, the 1992 version was the first to break the principles down into two major sections: General Principles and Code of Conduct. This clearly delineated aspirational parts of the document from the enforceable standards. The current version of the code followed this tradition and includes five General Principles and 89 specific standards, organized under ten headings. The latter are intended to be specific enough so that it is clear when a psychologist has run afoul of one or more. In reality, some standards are very specific (e.g., “Psychologists do not engage in sexual intimacies with students or supervisees who are in their department, agency or training center or over whom psychologists have or are likely to have evaluative authority.”), while others include qualifiers (e.g., “A psychologist refrains from entering in a multiple relationship if the multiple relationship could reasonably be expected to impair the psychologist’s objectivity, competence, or effectiveness.” [italics added]). The 2002 version of the Ethical Principles and Code of Conduct is reprinted in Appendix A.

The ethical standards is not the only document published by the APA concerned with ethical issues. The organization has produced guidelines in a variety areas that have relevance for ethical decision making and behavior. These include the Guidelines for Providers of Psychological Services to Ethnic, Linguistic, and Culturally Diverse Populations (APA, 1990), Guidelines for Computer Based Tests and Interpretations (APA, 1987b), General Standards for Providers of Psychological Services (APA, 1987a), Standards for Educational and Psychological Testing (1985), Ethical Principles in the Conduct of Research with Human Participants (1982), Guidelines for Ethical Conduct in the Care and Use of Animals (1986), Guidelines for Child Custody Evaluations in Divorce (APA, 1994), Guidelines for Psychological Evaluations in Child Protective Matters (APA, 1998) and Guidelines for Psychotherapy with Lesbian, Gay, and Bisexual Clients (APA, 2001).

human welfare.” About 13 percent of APS membership consists of psychologists with clinical or other applied orientations.

Concluding Remarks

As clinical psychology has grown, it has diversified tremendously. The diversity of clinical psychologists’ theoretical orientations, professional activities, and ideas about the definition and future of their field might be seen as a threat to the unity of the discipline. Is there really a clinical psychology? Or are there multiple clinical psychologies? As this brief history of clinical psychology illustrates, unity has never been the field’s strong suit. Rather, clinical psychology as we know it today is the product of many varied and often, clashing viewpoints. Consequently, the discipline is not a comfortable home for someone looking
for structure and certitude. The issues the field is struggling with today (e.g., how to adapt to managed care, whether psychologists should pursue prescription privileges, what the relationship is between clinical psychology and the larger science of psychology) will shape what happens to the field in the years to come. But undoubtedly as those issues are resolved, new ones will develop. And the beat goes on.