THE CONTEXT OF FORENSIC PSYCHOLOGY

CHAPTER 1

History of Forensic Psychology

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In HIS presidential address to the American Psychological Association (APA) in 1898, Hugo Münsterberg remarked "Peoples [sic] never learn from history" (Münsterberg, 1899/1994, p. 234). In similar fashion, in the introductory paragraph to this chapter in the first edition of this *Handbook*, we asserted that psychologists do not care about the history of their profession. Instead, we said, they are drawn to contemporary issues and theories, even fads. In the second edition, we acknowledged that our initial statement had been somewhat rash. Indeed, we reassert now that psychologists do indeed care, as is apparent from numerous articles published in professional journals reviewing historical trends, as well as the continuing publication of a journal exclusively devoted to the history of psychology. Nevertheless, many psychologists today doubtlessly would still share the sentiments of Stanley Brodsky, who candidly began an article with the comment, "I am a dreadful historian" (1996, p. 5). Brodsky proceeded to demonstrate, however, through his insights into earlier events, that he was not a dreadful historian at all.

Psychology, like other disciplines, needs historical insights. It needs to understand whence it came in order to assess where it is going. A perusal of journals and books published at the turn of the twentieth century, for example, may spark interest in a concept long forgotten or a predecessor whose theories and research deserve to be revisited. On the other hand, delving into early works reminds us of false starts and the occasional damage they did, such as the work of Henry H. Goddard on feeblemindedness during the early 1900s and the self-promotion of Münsterberg, who is sometimes called the father of applied psychology.

In these early years of the twenty-first century, forensic psychology holds claim as the newest branch of applied psychology, having been recognized by the APA as a specialization in 2001. In this chapter, though, forensic psychology is being viewed broadly. It is both (1) the *research endeavor* that examines aspects of human behavior directly related to the legal process (e.g.,

eyewitness memory and testimony, jury decision making, and criminal behavior) and (2) the *professional practice* of psychology within or in consultation with a legal system that encompasses both criminal and civil law and the numerous areas where they intersect. Therefore, forensic psychology refers broadly to the *production* of psychological knowledge and its *application* to the civil and criminal justice systems. It includes activities as varied as the following: court-room testimony, child custody evaluations, law enforcement candidate screening, treatment of offenders in correctional facilities, assessment of plaintiffs in disability claims, research and theory building in the area of criminal behavior, and the design and implementation of intervention and prevention programs for youthful offenders. It should be noted that Hess also defines forensic psychology broadly in the following chapter, as he did in the two earlier editions of the *Handbook* (Hess, 1987, 1999).

Others have adopted a more narrow view. According to Ronald Roesch, for example (cited in Brigham, 1999, p. 279), "Most psychologists define the area more narrowly to refer to clinical psychologists who are engaged in clinical practice within the legal system." In addition, in recognizing forensic psychology as a specialty in 2001, the APA itself adopted the narrow approach, to include "the primarily clinical aspects of forensic assessment, treatment, and consultation" (Otto & Heilbrun, 2002, p. 8). Although we appreciate the rationale behind this more limited definition, we continue to see the merits of a more inclusive approach. Consequently, this history chapter embraces areas of forensic psychology that may not be considered relevant by those who share the more narrow view.

It should be noted, also, that the term "legal psychology" is sometimes used interchangeably with this narrower view of forensic psychology. However, it is also sometimes used in a slightly more expanded sense, to include not only clinical practice but also theory and research relating to the law. Our own conception of legal psychology is closer to this second view. It is a subset of forensic psychology, referring to psychological theory, research, and practice that is *directly* pertinent to the law and legal issues. Thus, legal psychology focuses on psychologal research and contacts with judges and lawyers in a wide range of contexts.

In the pages to follow, after an introductory section covering seminal contributions, we review developments in four major areas of forensic psychology. They are legal psychology (with subheadings for expert testimony and assessment), correctional psychology, police psychology, and criminal psychology. Readers will undoubtedly recognize that there is considerable overlap in these categories and in the subheadings. Correctional psychology, for example, presupposes some understanding of criminal psychology. Assessment, both cognitive and personality, is an essential tool of the trade for psychologists, and it underlies each area of practice. Nonetheless, for purposes of identifying historical trends and landmarks, discussion of these four major areas is warranted.

We focus, of course, on forensic psychology distinguished from forensic psychiatry, which has its own well-documented, rich history. In addition, we focus on the work of forensic psychologists in North America, although we give due recognition to the work of European psychologists, who dominated

the field prior to World War I. We review the achievements of psychologists from the end of the nineteenth century and extend our discussion into the 1970s, when forensic psychology came of age (Loh, 1981). The reader interested in more detail about the issues and individuals discussed might check landmark summaries of psychology and law published by Whipple (1909-1915, 1917), Hutchins and Slesinger (1929), Louisell (1955, 1957), Tapp (1976), Loh (1981), and Monahan and Loftus (1982). Developments after the 1970s will be addressed in the works of other contributors to this *Handbook*.

LEGAL PSYCHOLOGY

Do chestnut or oak trees lose their leaves earlier in autumn? Do horses in the field stand with head or tail to the wind? In which direction do the seeds of an apple point? What was the weather one week ago today?

When J. McKeen Cattell posed these questions to 56 college students at Columbia University in March 1893, he was probably conducting one of the first studies, albeit an informal one, on the psychology of testimony. The questions he asked his students were similar to those that "might naturally be asked in a court of justice" (Cattell, 1895, p. 761). His subjects were allowed 30 seconds to consider their answers, then told to write their responses. They were also asked to indicate their degree of confidence in each answer.

When Cattell conducted his informal study, it was reasonably well established that courtroom eyewitness testimony was unreliable and incomplete. Both French and German psychologists were familiar with the powerful influence of suggestion over sensation and perception, having conducted substantial research in these areas. The specific conditions under which testimony was inaccurate were not known, however. Furthermore, as Cattell noted, "An unscrupulous attorney can discredit the statements of a truthful witness by cunningly selected questions. The jury, or at least the judge, should know how far errors in recollection are normal and how they vary under different conditions" (p. 761). But Cattell himself was surprised at both the degree of inaccuracy he uncovered and the wide range of individual differences in the levels of confidence expressed by the students. Answers to the weather question, for example, were "equally distributed over all kinds of weather which are possible at the beginning of March" (p. 761). Some students were nearly always sure they were correct, even when they were not, while others were consistently uncertain and hesitant in their answers, even when they were correct.

Cattell's study probably was the genesis of modern forensic psychology, because it sparked the interest of other researchers in the psychology of testimony. Joseph Jastrow immediately replicated Cattell's "experiment" at the University of Wisconsin and obtained similar results (Bolton, 1896). Aside from this brief flirtation, however, American psychologists did not immediately embrace the study of legal issues.

Psychologists in Europe seemed more intrigued. First, Alfred Binet (1900) replicated Cattell's project in France. In addition, he summarized relevant experiments on the psychology of testimony that were being conducted in Europe and called for a "science psycho-judiciaire" (Binet, 1905; Binet & Clarparede, 1906). Most significant for the historical development of forensic psychology, however, was the apparent fascination Cattell's experiment and Binet's work held for (Louis) William Stern, who had received his PhD in psychology at the University of Berlin under the tutelage of H. Ebbinghaus. In 1901, Stern collaborated with the criminologist F. V. Liszt in an attempt to lend realism to the Cattell design. Stern and Liszt conducted a "reality experiment" in a law class, staging a bogus quarrel between two students over a scientific controversy. The argument accelerated until one student drew a revolver (Stern, 1939). At this point, the professor intervened and asked for written and oral reports from the class about aspects of the dispute. Although the witnesses were law students who, Stern asserted, should have known the pitfalls of testifying, none could give a faultless report. The number of errors per individual ranged from 4 to 12. Moreover, the researchers found that inaccuracies increased with respect to the second half of the scenario, when excitement and tension were at their peak. They concluded—tentatively—that "emotions reduce accuracy of recall."

Stern became an active researcher in the psychology of testimony over the next few years (1906, 1910). He also helped establish the first journal on the psychology of testimony, Betrage zur Psychologie der Aussage (Contributions to the Psychology of Testimony), which he edited and which was published at Leipzig. The journal was superseded in 1908 by the much broader Zeitschrift fur Angewande Psychologie (Journal of Applied Psychology), the first of its kind. In his Aussage research Stern concluded, among other things, that "subjective sincerity" does not guarantee "objective truthfulness"; that leading and suggestive questions contaminate the accuracy of eyewitness accounts of critical events; that there are important differences between adult and child witnesses; that lineups are of limited value when the members are not matched for age and physical appearance; and that interceding events between an initial event and its recall can have drastic effects on memory. It can be concluded, therefore, that modern forensic psychology began as legal psychology with empirical research on the psychology of testimony.

As a parallel phenomenon, European, particularly German, psychologists at the turn of the century were beginning to be used as "expert witnesses" in criminal cases, often applying the knowledge gained from the newly established psychological laboratory. They offered both factual testimony, such as reporting the results of an experiment, and opinion testimony. Perhaps the earliest such testimony, an example of opinion testimony, occurred in 1896, when Albert von Schrenck-Notzing testified at the trial of a Munich man accused of murdering three women (Hale, 1980). The murders had received extensive and sensational press coverage in the months prior to the trial, and Schrenck-Notzing (1897) opined that this pretrial publicity, through a process of suggestion, probably led numerous witnesses to "retroactive memory-falsification." Witnesses could not distinguish between what they had seen and what the press reported had happened. He supported his opinion with factual testimony in the form of accounts of laboratory research on memory

and suggestibility. Although the accused was convicted on the basis of solid evidence, Schrenck-Notzing's direct application of the psychology of suggestion to court processes helped stimulate the interest of both German jurists and psychologists (Hale, 1980).

European psychologists at the turn of the twentieth century and until World War I also were delving into the area of guilt deception, the precursor of the lie detection of today. In 1904, psychologists in Germany, Austria, and Switzerland were busy developing a lie detection test for use in criminal investigations. The test was a word association/reaction time task where key words were embedded in a list of innocuous words. Presumably, the slower the reaction time in recognizing the key words, the more likely the respondent was lying. Barland (1988), who has reviewed this history in impressive detail, notes that this approach did not catch on because it was inefficient, time-consuming, and often yielded inconclusive results.

With the exception of this work on guilt deception, early forensic psychology first made its mark in the courtroom, where psychologists in Europe both consulted with judges and lawyers and offered testimony. American psychologists, though, did not become firmly established in this arena until well into the twentieth century. However, in both Europe and the United States, psychologists became involved in conducting research that was relevant to the legal process, although most did not promote it as such.

At the turn of the century, psychologists remained comparatively uninterested in applying research on topics related to law. First, they were just beginning to explore the broad psychological landscape and had little inclination to specialize in law-related matters. This reticence was probably also due to the influence of Wilhelm Wundt, who had trained many of the American pioneers in his Leipzig laboratory (Cattell being the first). Wundt, a philosopher and an experimentalist, was wary of applying psychology until sufficient research had been conducted. He believed that the premature use of partial information could be disastrous. His students often took this caveat quite seriously, although some, like Cattell, eventually began to link the laboratory to the world outside.

One of Wundt's not-so-cautious students was the German psychologist Hugo Münsterberg, who arrived in the United States in 1892 at the invitation of William James to direct the psychology laboratory at Harvard University. Münsterberg spent 24 years trying to persuade the public that psychology had something to offer virtually every area of human endeavor. Now acknowledged by many as the father of applied psychology, he believed psychological knowledge could be applied to education, industry, advertising, music, art, and, of course, law. His claims were often exaggerated, however, and his proposals were rarely empirically based. He usually published in popular magazines rather than scholarly journals (some of his colleagues called his a "Sunday-supplement psychology"). He also incessantly promoted himself and his native Germany, a practice that alienated him increasingly from his colleagues and the public as World War I approached. In fact, this ardent pro-German stance may have had as much to do with the public's antipathy toward him as his abrasive personality.

Not surprisingly, the legal community vehemently resisted his intrusion into its territory (Hale, 1980). Even before the eve of World War I, the great legal commentator Wigmore (1909) found it necessary to assail Münsterberg in a satirical and devastating law review article. Wigmore's attack was prompted by the publication of Münsterberg's (1908) controversial best-seller *On the Witness Stand*, in which he proclaimed that the time was ripe to apply psychology to the practical needs of the legal system. The book dealt with a wide spectrum of topics, ranging from witness accuracy and jury persuasion to hypnosis and lie detection.

In 1914, Münsterberg published a study of group decision making, using Harvard and Radcliffe students as subjects, which he titled "The Mind of the Juryman." In a conclusion not atypical of the times, he commented that "the psychologist has every reason to be satisfied with the jury system as long as the women are kept out of it" (p. 202, cited in Moskowitz, 1977). He based his conclusion on a finding that the female students in his study were less accurate in their final decisions than the male students. Interestingly, as will be noted shortly, one of his own students later arrived at a very different conclusion.

Münsterberg, always willing to give speeches, gave his inaugural lecture at Radcliffe College in 1894 and his last at the same location in 1916, when he suddenly died of a heart attack at midsentence while lecturing his general psychology class (Landy, 1992). Landy writes that "at the time of his death... Münsterberg was an object of public scorn and was well on the way to professional ostracism. By 1919, less than three years after his death, there was hardly any reference to any of his more than 10 books and dozens of articles in basic and applied psychology" (p. 787). Benjamin (2003, p. 734) notes that Münsterberg "was one of the most despised individuals in America."

In sum, then, Münsterberg has been accused of being more an opportunist than trailblazing (Kuna, 1978). It is tempting to blame his brashness, his apparent despicable demeanor, and his pro-German views for the tenuous and occasionally hostile initial relationship between psychology and law. Nonetheless, he undeniably pushed his reluctant American colleagues into the practical legal arena and made a seminal contribution to forensic psychology. Readers are left to make their own judgments as to whether his contributions represent a false start.

During these early years, European psychologists continued to interact much more regularly with the courts than their American counterparts did. In 1911, several psychologists testified at a Belgian murder trial in which a man was accused of raping and killing a 9-year-old girl. Two of the child's playmates had apparently seen the murderer but gave inconsistent and contradictory accounts. Among the psychologists retained by the defense was J. Varendonck, who designed a series of experiments based on questions suggested by information obtained at the preliminary hearing. Varendonck's subjects were children of approximately the same age as the two witnesses (8 to 10). He found that they were inaccurate in their recall of important events. Over the objection of the prosecution, he was allowed to present the results of these experiments as well as the general research on the psychology of testimony that was available at that time. The jury found the defendant not guilty.

Varendonck, it should be noted, was vehemently opposed to *any* use of child witnesses in the courtroom. In contrast, both Binet (1900) and Stern (1939) believed that errors in recollection, whether by children or adults, were more a reflection of leading, suggestive courtroom questioning than of any "natural" tendency to distort reality.

In 1922, Karl Marbe, a psychology professor at the University of Wurzburg, became one of the earliest European psychologists to testify at a civil trial, offering expert opinion on the psychological issue of reaction times as applied to a train wreck near Mullheim. Professor Marbe was asked to testify as to the probable effect of alcohol both on the mental status of the engineer and on the reaction time of the fireman and guard applying the breaks. Based on reaction-time experiments, Marbe testified that the train could not have been stopped in time to avert a disaster. During the same year, Marbe also testified in a criminal trial similar to the one in which Varendonck had challenged the credibility of child witnesses. Several German adolescent girls had accused their teacher of sexually molesting them. Marbe persuaded the jury that the statement of the girls was unreliable, and the teacher was exonerated.

World War I placed in abeyance most of the exploration in applying psychology to law, although the war and early postwar years saw a few landmarks in American forensic psychology, including the gradual acceptance of psychologists as expert witnesses, particularly on matters of fact. The first psychologists were also appointed to law school faculties during these years.

Psychologist Donald Slesinger, a protégé of Robert M. Hutchins, made his mark during the years immediately following World War I. Although he had no formal legal training, Slesinger was appointed by Acting Dean Hutchins as a one-year Sterling Fellow to the Yale Law School in 1927. The following year he became a research assistant. In 1929, he was appointed associate professor, teaching a course in the psychology of evidence, which appears to qualify him as the first psychologist granted faculty status in an American law school. In 1930, Slesinger followed Hutchins to the University of Chicago, where he served as professor of law and, briefly, as dean of the Law School.

Several years earlier, psychologist William Marston had been the first to receive a faculty appointment as professor of legal psychology. He joined the faculty at American University in 1922. Marston was by far the most influential psychologist associated with the legal system during this era. He was a student of Münsterberg but did not have his mentor's penchant for alienating the legal community and much of the American public. He received a law degree in 1918 and a PhD in 1921, both from Harvard. Marston's interests were multifaceted. (He was even the originator, cartoonist, and producer of the successful comic strip *Wonder Woman*, under the pen name Charles Moulton—a dubious distinction to be sure.) Although admitted to the Massachusetts bar, Marston soon gave up his law practice to concentrate on psychology.

As a laboratory assistant in psychology at Radcliffe College, Marston (1917) had discovered a significant positive correlation between systolic blood pressure and lying, which became the basis of the modern polygraph. In fact, Marston was the psychologist who testified in the landmark case *Frye v. U.S.* (1923), the case that set the original standard for the acceptance of expert

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testimony in federal courts. Although his continuing work in lie detection (Marston 1920, 1921, 1925) represents one of his major contributions to the forensic area, it was by no means the only one. He frequently consulted with attorneys, police, and other criminal justice personnel, and his evidence was determinative in the acquittals of several defendants accused of murder. It is likely, therefore, that Marston—along with Lewis Terman and psychologists associated with the New York City Psychopathic Clinic (both to be discussed later in the chapter)—qualifies as one of the first psychological consultants to the criminal justice system in the United States.

Marston also conducted the first serious research on the jury system (Winick, 1961). Using subjects in simulated jury conditions, he found in a series of studies (Marston, 1924) that written evidence was superior to oral evidence; that free narration, though less complete, was more accurate than cross-examination or direct questioning; that a witness's caution in answering was a good indicator of accuracy; and that female jurors considered evidence more carefully than male jurors (compare with Münsterberg's conclusions about female jurors, mentioned earlier). Because of his legal background and his cautious style, Marston's ideas and research were more acceptable to the legal community than Münsterberg's had been, although there is little evidence that the legal system put his findings to extensive use. This is not surprising because some of his recommendations (e.g., free recall rather than directed questions and cross-examinations) were inapposite to the adversarial process, and others would have required fundamental changes in court procedures.

Also during this time period, various reviewers took on the task of documenting the progress of legal psychology. Hutchins and Slesinger, for example, coauthored numerous summary articles on its status (1927, 1928a, 1928b, 1928c, 1929). Slesinger wrote another with Marion Pilpel in 1929, surveying 48 articles written by psychologists on issues relating to the law that had appeared in professional journals up to that time. Eleven were concerned with the psychology of testimony, ten with deception, seven with intelligence and crime, and six with criminal behavior. The remainder focused on general topics such as the scientific method or legal research. Fifteen of the 48 articles had been written by German psychologists.

Like applied psychology in general, legal psychology was somewhat dormant between the two World Wars and did not recoup its energy until the late 1940s and 1950s. In addition to Marston's work, the period did see scattered research by Weld (Weld & Danzig, 1940; Weld & Roff, 1938) on how juries formed opinions and verdicts, a master's thesis on the relationship between narrative and interrogative methods of questioning (Cady, 1924), another study on questioning and testimony (Snee & Lush, 1941), and a survey of legal and psychological opinions about the validity of some of Wigmore's rules of evidence (Britt, 1940).

According to Loh (1981), there was interest in psychology and law during the late 1920s and the 1930s. However, the interest was almost exclusively on the part of lawyers, who produced such books as *Legal Psychology* (Brown, 1926), *Psychology for the Lawyer* (McCarty, 1929), and *Law and the Social Sciences* (Cairns, 1935). Wigmore (1940), the foremost authority on rules of evidence, paved the way for the use of test data in the courtroom. He observed that the

psychometrist introducing test evidence would stand "on the same footing as the expert witness to insanity" (cited by McCary, 1956, p. 9), as long as such tests are recognized as valid and feasible by the general scientific community.

In 1931, Howard Burtt (who was also a former student of Münsterberg) wrote *Legal Psychology*, the first textbook in the area written by a psychologist. Burtt's primary interest was industrial psychology, however, and he himself did not conduct much research on legal issues. Although the book made a valuable contribution to the academic psychological literature, it had little discernible influence on the legal profession or on applied psychology in general. In 1935, Edward S. Robinson published *Law and the Lawyers*, that predicted that jurisprudence would become one of the family of social sciences and argued that all of its fundamental concepts must be brought into line with psychological knowledge. The book was lambasted by lawyers and essentially ignored by psychologists. In hindsight, contemporary scholars have found Robinson's ideas much more palatable (e.g., Loh, 1981; Horowitz & Willging, 1984).

ACCEPTANCE OF PSYCHOLOGISTS AS EXPERT WITNESSES

It is generally believed that American psychologists have served as expert witnesses since the early 1920s (Comment, 1979), but as we have seen they clearly provided information to the courts, particularly the civil courts, before that time. According to Rogers (1910, 1918), the results of experimental research on visual perception were routinely accepted in trademark infringement cases. In Coca-Cola Company v. Chero-Cola Company (1921), for example, an experimental psychologist was asked whether the trademarks used by the two companies were so similar as to be likely to cause confusion in the public mind and ultimately deceive the consumer. This was apparently considered a "safe" undertaking, as the psychologists were not infringing on the territory of the "medical experts"—physicians and psychiatrists—who routinely testified on matters of criminal responsibility. As Louisell (1955) notes, however, because trial court records are generally unavailable and only appellate decisions are published, the testimony of psychologists, particularly in civil cases, may have been less rare than the paucity of documentation would indicate. We do know that psychological testimony was almost inevitably rejected in criminal cases involving the defendant's mental state. "As a general rule, only medical men—that is, persons licensed by law to practice the profession of medicine can testify as experts on the question of insanity; and the propriety of this general limitation is too patent to permit discussion" (Odom v. State, 1911; cited in Comment, 1979, fn. 14).

The first published case in which an American psychologist qualified as an expert appears to be *State v. Driver* in 1921. The occasion was only a partial victory for forensic psychology, however. A West Virginia trial court accepted the chief psychologist of the State Bureau of Juvenile Research as an expert on the matter of juvenile delinquency. However, it rejected his testimony, based on psychological test data, that a 12-year-old alleged victim of an attempted rape was a "moron" (an unfortunate term coined by Henry H. Goddard, who is discussed later) and could not be presumptively believed. In agreeing with the trial court, the West Virginia Supreme Court noted, "It is yet to be demonstrated

that psychological and medical tests are practical, and will detect the lie on the witness stand" (State v. Driver, 1921, p. 488). Although some commentators interpreted Driver as a major loss for psychologists wishing to achieve status as expert witnesses, Louisell (1955) noted that the decision was not a rejection of psychologists per se, only of the particular evidence offered by one psychologist. Nevertheless, it was not until much later, in the 1940s and 1950s, that psychologists testified in courts of law on a regular basis, at least in some jurisdictions. They offered opinions and presented data relevant to subjects as diverse as the influence of pretrial publicity on potential witnesses and juries, the effects of pornography on adolescents, the effect of certain educational practices on children, and the likely influence of advertisements on consumers (Greenberg, 1956; Loh, 1981; Louisell, 1955). This is not to say that there was widespread acceptance of the idea that psychologists deserved a niche in the courtroom. Resistance to the idea, or at best a cautious approach, consistently characterized much of the legal literature (Comment, 1979).

In the early 1940s and the postwar era, appellate courts also began to allow qualified psychologists as expert witnesses on the issue of mental responsibility for criminal and tortious conduct. Loh (1981) attributes this eventual acceptance to an increase in professionalization, "the rapid growth of mental health professions during this period, and the formulation of legal doctrines of insanity consistent with modern psychiatry" (1981, p. 323).

The first influential decision was *People v. Hawthorne* (1940), a Michigan case. Hawthorne had been tried for the murder of his wife's lover and had pleaded not guilty by reason of insanity. The trial court refused to qualify as an expert witness a professor of psychology from Michigan State Normal College who had a PhD and an impressive list of credentials. In finding that the trial court had erred in not accepting the psychologist as an expert, the Michigan Supreme Court ruled that the standard for determining expert status was not a medical degree but the extent of the witness's knowledge. It advised trial courts to evaluate carefully the merits of a potential witness's claim to expertise, noting that a psychologist's ability to detect insanity could not be presumed inferior to that of a "medical man." The dissenters, however, believed that insanity is a disease and therefore only a person with medical training should qualify as an expert.

Later, in Hidden v. Mutual Life Insurance Co. (1954), the 4th Circuit Court of Appeals allowed psychological expertise to be applied to a *civil* case relating to mental status. The insured argued that a disabling nervous condition prevented him from engaging in any gainful occupation and entitled him to disability benefits. A clinical psychologist with a doctoral degree administered a battery of projective tests and testified on his behalf. Not only did he report on the test results, but he also gave the opinion that the plaintiff deserved the benefits. When the lawyer for the insurance company objected, the trial judge instructed the jury to disregard the entire opinion testimony on the grounds that the psychologist did not qualify as an expert. The circuit court of appeals ruled that the psychologist should have been qualified as an expert to express his opinion about the plaintiff's mental condition.

While some psychologists were struggling to be accepted as experts on questions of mental status, competence, and criminal responsibility, others

during this era were joining the crucial legal battle against school segregation by testifying and consulting with attorneys in the state cases that would ultimately culminate in the 1954 landmark ruling, Brown v. Board of Education (Kluger, 1975). David Krech and Helen Trager, social psychologists who had published articles on racial attitude tests, and Horace B. English, an expert on child psychology, were among many who testified for the plaintiffs at some of the school segregation trials. On the other hand, psychologist Henry Garrett, a former president of the APA, testified on behalf of the state (Jackson, 2000). Perhaps the most widely publicized—and since then highly critiqued—contribution on behalf of the plaintiffs was that of Kenneth Clark and Mamie Clark, who conducted the now-famous "doll research" to gauge the effects of segregation. Kenneth Clark then gave factual testimony reporting the results of this research (Kluger, 1975). When the NAACP appealed Brown and three other segregation cases to the U.S. Supreme Court, Kenneth Clark, Isidor Chein, and Stuart W. Cook wrote the Social Science Statement that included signatures of 32 eminent social scientists (Jackson, 2000).

History has not been kind to these early scientists, as has been demonstrated in a recent article by John P. Jackson (2000). They were faulted by later social scientists for naïve methodology, lack of objectivity, and faulty conclusions based on insufficient scientific evidence. In his historiographical inquiry, however, Jackson notes that the doll experiments were but one prong of many studies that psychologists and other social scientists referenced in their trial testimony and in the brief submitted to the Supreme Court. He also argues convincingly that critiques of these social scientists reflected a misreading of their testimony, their research, and their evaluation of relevant evidence.

During the same era, psychologists were continuing to make enough inroads testifying on the issue of criminal responsibility that psychiatrists felt the need to protect their turf. In 1954, the Council of the American Psychiatric Association, the Executive Council of the American Psychoanalytical Association, and the American Medical Association joined in a resolution stating that only physicians were legitimate experts in the field of mental illness for purposes of courtroom testimony. Other individuals could participate only if their testimony was coordinated by medical authority. The resolution greatly influenced trial courts (Miller, Lower, & Bleechmore, 1978), which became reluctant to accept independent psychological testimony.

Finally, in *Jenkins v. United States* (1962), the Court of Appeals for the District of Columbia gave its own direct, although conditional, support to the use of psychologists as experts on the issue of mental illness. Although the court was sharply divided, its decision remains the predominant authority for the use of psychologists in the area of criminal responsibility. Following that opinion, federal courts and increasingly more state courts certified psychologists as expert witnesses in both criminal and civil courts.

COGNITIVE AND PERSONALITY ASSESSMENT

During the years in which Münsterberg was proselytizing about psychology's usefulness in the courtroom, particularly involving expert testimony, another American psychologist was more quietly making inroads into a different

forensic area, one specifically related to juvenile courts. In 1909, clinical psychologist Grace M. Fernald worked with psychiatrist William Healy to establish the first clinic designed for youthful offenders, the Juvenile Psychopathic Institute. It was initially developed to serve the newly established Juvenile Court of Chicago by offering clinical diagnoses of "problem" children. Fernald, who received her doctorate from the University of Chicago in 1907, was probably the first clinical psychologist to work under the supervision of a psychiatrist (Napoli, 1981), as well as one of the earliest psychologists to specialize in the diagnosis and treatment of juvenile delinquency. The Institute, which extended its services rapidly to include treatment and research as well as diagnosis, became a public agency in 1914, the Institute for Juvenile Research. Arguably, it also provided the earliest formal internships in forensic psychology in the country (Resnick, 1997).

Fernald and Healy used the relatively new Stanford-Binet Intelligence Scale to test delinquents, but they soon realized the importance of obtaining "performance" measures as well. This prompted them to develop the Healy-Fernald series of 23 performance tests, which they began to use in 1911. The two eventually went their separate ways. Fernald became a specialist in mental deficiency and testing and taught psychology at UCLA for 27 years, until her retirement in 1948.

Healy, along with psychologist Augusta Bronner, went on to establish the Judge Baker Clinic (Boston) in 1917. Healy (who was a former undergraduate psychology student of William James at Harvard) gained considerable attention in 1924, when he evaluated Nathan Leopold and Richard Loeb in a famous juvenile case sweeping the country at the time (Fass, 1993; Herman, 2001). "According to Healy, teenagers Nathan Leopold and Richard Loeb were not cold-blooded murderers; they were deeply troubled youngsters, whose tragic murder of a neighbor was attributable to undiagnosed developmental difficulties" (Herman, 2001, pp. 304–305).

During the first third of the twentieth century, most psychologists providing services to the courts were psychometrists associated with clinics. It appears that much of the forensic work of psychologists during this period consisted of cognitive and personality assessments of individuals, both juveniles and adults, who were to come before the courts. The drudgery of day-to-day testing (often under the watchful eyes of a physician or psychiatrist) made applied psychology, as it was then known, less than appealing as a profession. Often, however, it was where female psychologists were most accepted. In the 1930s, for example, fewer than one-third of all American psychologists were women, but women made up over 60% of all applied psychologists (Napoli, 1981).

In one of the first published accounts of the work of these early psychometrists, E. I. Keller (1918) described some of the challenges they faced. He noted that in December 1916, a psychopathic laboratory was established at the New York City Police Department for the express purpose of examining persons detained before trial. The staff included psychiatrists, neurologists, social workers, and psychologists, whose task was to conduct hasty pretrial evaluations. (Because these psychologists worked out of the police department but conducted evaluations for the courts, they could be considered both legal and po-

lice psychologists.) According to Keller, who was a consulting psychologist to the clinic, detainees arrived for testing at 9 A.M. "The disadvantage is the lack of time, for all prisoners [*sic*] must be examined in time to get them to court by noon or earlier, and many courts are situated in distant parts of the city" (p. 85). Staff members had little time in which to conduct the evaluation and prepare a report that would help the court in its decision making.

The work of Henry H. Goddard during this time must be regarded with embarrassment. A student of G. Stanley Hall, Goddard paved the way for the massive intelligence testing of immigrants and residents of mental institutions, prisons, and juvenile training schools. His followers consulted with the juvenile courts and dutifully administered these tests to the children of the poor who arrived at their door. Goddard's warning that "feeble-minded" individuals should not be allowed to roam about freely in society because of their innate proclivity toward antisocial behavior contributed significantly to the incarceration of individuals during their reproductive periods as well as to the sterilization of residents in both juvenile and adult facilities (Kelves, 1984).

Psychologists continued to work in court clinics during the second third of the twentieth century, performing a variety of tasks that related to the assessment process (see Box 1.1). In addition, as we described earlier, they gradually became more involved in providing expert testimony, not only on the results of their assessments but also on research that was relevant to legal issues. Other psychologists continued to offer services to inmates and staff of jails and prisons, an endeavor that apparently began early in the twentieth century. It is to this second aspect of forensic psychology that we now turn.

BOX 1.1Help Wanted: Court Psychologist

An article in Volume 1 of *The American Psychologist* (Shartle, 1946) carried the following job description for a court psychologist.

COURT PSYCHOLOGIST (Clinical Psychologist)

Duties

Interviews offenders referred by the court to determine the causes of the crime, the attitudes and conflicts, and the educational, vocational, and social background of the client. Also may interview parents and guardians.

Administers and interprets individual intelligence, performance, and personality tests including projective techniques.

Writes complete case histories including interview information and test interpretations. Presents case histories and recommended treatment to colleagues including medical and other officers of the court. May testify in court.

Qualifications include MA in psychology with a PhD preferred, relevant course work (e.g., abnormal, clinical, psychometrics, criminology, medical subjects), previous experience, and emotional maturity.

Interestingly, Shartle noted that, though few psychologists were employed in such positions, there was indication that employment in the field would increase. However, "higher positions" in the court were not usually open to psychologists.

CORRECTIONAL PSYCHOLOGY

Lindner (1955) pinpoints 1913 as the first instance of psychological services being offered in a U.S. correctional facility, specifically a women's reformatory in the state of New York. The precise nature of the services and the identity of the psychologist(s) who provided them are not known.

The main function of psychologists employed in some capacity in the state and federal correctional systems during the 1910s and early 1920s was apparently the detection of "feeblemindedness" among offenders, a condition thought to lead to a life of crime (Giardini, 1942; Watkins, 1992). Again, the work of Goddard and his followers is relevant.

Concurrently, however, some psychologists became involved in a different endeavor, the classification of inmates into various groups for determining where they were to be placed. The first prison classification system developed by psychologists was apparently instituted in New Jersey in 1918 (Barnes & Teeters, 1959; Watkins, 1992). New Jersey also became the first state to hire a full-time correctional psychologist. The first state in the United States to provide comprehensive psychological examinations of all admissions to its prison system and applications for parole was Wisconsin, in 1924 (Bodemar, 1956).

In the late 1930s, Darley and Berdie (1940) surveyed 13 federal and 123 state prisons and learned that they employed a total of 64 psychologists who called themselves "prison psychologists." Although all considered themselves clinical psychologists, only about half had PhDs in psychology. Later, Raymond Corsini (1945) expressed concern that there was as yet "no history of prison psychology." He estimated that during the 1940s there were approximately 200,000 individuals confined in U.S. correctional facilities who were served by a mere 80 psychologists. Their work consisted of (1) testing (personality, aptitude, and academic progress); (2) giving educational, vocational, and personal guidance (usually at the inmate's request); and (3) maintaining working relationships with all members of the prison staff (see Box 1.2). In one of the most comprehensive surveys undertaken during the early 1940s, the Office of Psychological Personnel sent questionnaires to 4,580 psychologists (3,209 men and 1,371 women) in an effort to discover the nature of the profession (Bryan & Boring, 1946). Of the 3,241 questionnaires returned in 1940, 76 men and 20 women indicated they were employed as full-time psychologists in prisons or correctional institutions. Of the 3,106 questionnaires returned by the same group in 1944, 53 men and 27 women said they were employed in prisons or correctional institutions. Although these data support Corsini's estimation that between 80 and 100 psychologists were employed in the nation's correctional facilities during the early to mid-1940s, it is interesting to note that, by the mid-1940s, approximately one-third of prison psychologists were women.

Psychological services to corrections in Canada appeared much later, perhaps as late as the early 1950s. Watkins (1992) notes that Canadian correctional psychology made its first appearance in the literature in 1952 in a series of newsletters published by the Ontario Psychological Association. The newsletters focused on psychology in the Ontario provincial corrections programs and the federal correctional service. The first correctional psychologist in the fed-

BOX 1.2

Help Wanted: Correctional Psychologist

1940S VERSION

In Volume 1 of *The American Psychologist*, Shartle (1946) described the work of a prison psychologist.

PSYCHOLOGIST, PENAL INSTITUTION (Prison Psychologist)

Duties

Administers intelligence, aptitude, and other tests to either all inmates or certain groups depending on institutional policy. Writes an interpretation of test results for the prisoner's records.

Interviews each prisoner to determine background, attitudes, and personality traits for use in guidance, education, possibilities for parole, and placement. Results of interview are written and may be submitted in form of case study with test results or other reports.

Makes recommendations for parole and supplies technical information at staff meetings. Gives information in consultation with administrative officers or with specialists in the field of medicine, psychiatry, sociology, education, occupational training, or parole.

Assists in planning or revising programs for medically sponsored cases including psychiatric and severe physical disability cases.

Participates in research. Investigates problems of penal psychology or test construction and prepares reports of finding.

Again it was noted that opportunities in the field were limited and the number of openings not numerous. However, several states were planning postwar expansion in buildings and services.

eral system in Canada was employed in 1955 at St. Vincent de Paul Penitentiary (later renamed Laval Institution) in the province of Quebec (Watkins, 1992). Interestingly, correctional psychologists in Canada were employed primarily to classify inmates for security placement and were usually not a component of the mental health treatment afforded to inmates. In the United States, their role appears to have been broader (see Box 1.2).

This is not to suggest that classification was not an important enterprise. To the contrary, reliable offender classification was (and is) both an important service to offer to correctional administrators and in many respects a prerequisite to effective treatment. In both the United States and Canada, psychologists became more involved in developing and testing classification systems that went far beyond the crude versions of the early twentieth century. One of the earliest of these "modern" systems was the Jesness (1971) Classification System. Most well-known, however, was the system proposed by Edwin Megargee and based on the Minnesota Multiphasic Personality Inventory (MMPI). Megargee (1977), using his research on overcontrolled and undercontrolled personalities as a springboard, identified 10 "inmate types." Prison officials then made use of these groupings to assign inmates to custody levels, job assignments, and rehabilitation programs. According to Clements (1996, p. 132), Megargee's system

has held up "reasonably well" and is still in use in some prison systems. However, he adds that Megargee also should be credited for providing correctional psychologists with an excellent list of seven criteria for a good classification system.

In the 1960s and early 1970s, correctional psychology as a subdiscipline of forensic psychology began to expand. Until then, and although there were exceptions, psychologists in correctional facilities focused more on classification than on treatment, both because the demand for diagnostic services was great and the obstacles relative to respecting confidentiality and achieving the trust of inmates were difficult to surmount. In the 1960s, rehabilitation as a correctional goal gained favor, and psychologists spent more time working directly with offenders and providing treatment services. Although positions were plentiful, the turnover rate was high, primarily because psychologists often had not received the preparation for this environment (Watkins, 1992).

One noteworthy innovation that was introduced in federal prisons during this era was the unit management system that was initially conceptualized by Daniel Glaser (1964) and later promoted by Robert Levinson (Toch, 1992). Unit management divided prison populations into small groups of prisoners and staff members based on the programming needs of the former and the expertise of the latter. Some units—those in which more intensive treatment services could be provided—became "therapeutic communities." Other units provided education, training, or work experiences, together with some counseling (Toch, 1992). Although unit management lost favor during the punitive 1980s and 1990s (with overcrowding having its obvious effects), the concept survives in some state and federal facilities, particularly where substance abuse treatment is provided.

Many correctional psychologists worked in the trenches during the 1960s and early 1970s and made significant contributions. However, Stan Brodsky, probably more than any other single individual, was the most instrumental in launching modern correctional psychology. His two-year term as president of the American Association for Correctional Psychology (AACP) helped provide the impetus to move correctional psychology into a recognized and viable profession. (The AACP was actually born in 1953 under the name Society of Correctional Psychologists and underwent several name changes during the late 1950s through the early 1970s; Bartol & Freeman, 2005.) During 1972 and 1973, with Brodsky at the helm, the AACP played a key role in setting up a series of conferences on psychology in the criminal justice system, with emphasis on corrections. The proceedings were published in a volume edited by Brodsky (1973), Psychologists in the Criminal Justice System. The publication of this influential book could arguably be called the official launch date of modern correctional psychology, even though the AACP itself predated Brodsky's book. Brodsky also became the founding editor of the international journal Criminal Justice and Behavior, launched in 1974 and sponsored by the AACP. Brodsky's leadership and enthusiasm also helped build one of the earliest doctoral programs specifically designed to prepare clinical psychologists to work in the criminal justice system, particularly corrections, at the University of Alabama.

POLICE PSYCHOLOGY

Those who favor the more narrow definition of forensic psychology do not typically include police psychology in its purview. We have done so because police are sworn to uphold the law and are in many cases the gatekeepers to entry into criminal and juvenile courts, if not civil courts.

It is difficult to pinpoint precisely when police psychology began, primarily because individual psychologists have provided a variety of services to law enforcement without their work being formally recognized. Viteles (1929) noted that police departments in Germany were using psychologists in a variety of capacities as early as 1919. In the United States, in keeping with the psychometric movement of that era, early contributions centered around assessment, particularly cognitive assessment administered to candidates for law enforcement positions.

Four discernible but overlapping historical trends in American police psychology can be identified: (1) cognitive and aptitude screening, (2) personality assessment and the search for the "police personality," (3) stress management and other clinical services, and (4) fairness in screening and selection (Bartol & Bartol, 2004). The first trend (1916 to 1960) is characterized by attempts of psychologists to assess the intellectual skills required to be an effective police officer. The second trend (1952 to 1975) focused on the development of personality measures capable of distinguishing effective from less effective officers. During the second trend, there also were many unsuccessful attempts to identify a "police personality." The third trend (1974 to 1994) is characterized by psychologists becoming increasingly involved in the identification and treatment of stress and other emotional reactions often experienced by police officers. Such topics of interest included the use of excessive force, police decision making, postshooting traumatic reaction, fitness for duty evaluations, and police suicide. The fourth trend (1980 to the present) refers to the legal requirements that all persons should have an equal chance of being selected on the basis of individual merit and qualifications. Topics during this trend include the Americans with Disabilities Act of 1990, gender issues in policing, and minority/ethnic/racial composition of law enforcement agencies. Because this chapter focuses on early history, we only briefly sketch the first two trends.

Trend One

Lewis Terman (1917) was the first American psychologist to use "mental tests" as screening devices in the selection of law enforcement personnel. On October 31, 1916, at the request of the city manager of San Jose, California, he administered an abbreviated form of the Stanford-Binet to 30 police and fire department applicants. They ranged in age from 21 to 38, with a median age of 30. Only four had attended high school, and none had gone beyond the sophomore year. Terman found that most of the applicants functioned near the dull-normal range of intelligence (68 to 84 on the Stanford revision of the Binet-Simon Intelligence Scale); only three obtained an IQ over 100, the score

considered average for the general population. Based on his experience with the intellectual capabilities of school-age children, Terman suggested, somewhat arbitrarily, that applicants with an IQ under 80 were not fit for police work or firefighting. The city manager agreed, and 10 applicants were immediately excluded from further consideration.

A contemporary of Terman, psychologist Louis Thurstone, was also interested in the value of mental testing to police screening. Thurstone (1922) administered the newly developed Army Intelligence Examination (Army Alpha) to 358 male members of the Detroit Police Department. The Army Alpha, developed by Robert Yerkes, E. L. Thorndike, and Lewis Terman and adopted by the U.S. Army in 1917, was probably the first exclusively American test of intelligence (Resnick, 1997). Police officers at all ranks scored below average on the Army Alpha; in fact, the more experienced the police officer, the lower was his intelligence score. The average score for the 307 patrol officers was 71.44; the sergeants averaged 54.71, and the 17 lieutenants 57.80 (Army Alpha mean = 100, standard deviation of 15). Thurstone concluded that law enforcement did not attract intelligent individuals. He also surmised that the more intelligent individuals who entered police service left for other occupations where their abilities and intelligence were better utilized.

Law enforcement officers were vindicated somewhat, however, when Maude A. Merrill (1927) administered the Army Alpha to a group of already employed officers and applicants. They scored at the average level (the sample's mean IQ was 104). The differences between her findings and those of Terman and Thurstone were probably due to department leadership factors, recruitment procedures, and selection ratios (Terrio, Swanson, & Chambelin, 1977).

Trend Two

In the years between the two World Wars psychologists gradually became more involved in the screening of law enforcement personnel and began to incorporate personality assessment into that enterprise. Wilmington, Delaware, and Toledo, Ohio, appear to share the distinction of being the first two cities to require ongoing psychological screening for use in police selection, in the form of mental and personality tests (Gottesman, 1975; Oglesby, 1957). The year was 1938. Thus, personality tests came on the scene at about this time. It was not until the late 1950s and 1960s, though, that personality assessment overtook cognitive tests in the screening of law enforcement personnel. While the aforementioned psychologists were among the first to study the cognitive capacities of police officers and candidates, there is no indication that they consistently participated in the screening and selection of law enforcement personnel. At this point, we have no information about who might have been the first psychologist to assume this regular role. As late as 1939, Donald Paterson (1940) could identify only one professional psychologist, L. J. O'Rourke, who had actively investigated the validity of the civil service examination system, even though the Civil Service Commission had adopted routine competitive exams as far back as 1883.

During the late 1940s and the 1950s, psychologists continued to consult with police departments. The psychological screening initiated by the Wilmington and Toledo police departments was adopted by other cities; Jacksonville in 1947, Berkeley in 1949, Oakland in 1950, New Orleans in 1952, and Pasadena, Philadelphia, Milwaukee, and Cleveland in 1953 (Gottesman, 1975; Oglesby, 1957). In June 1952, the Los Angeles Police Department began to administer a battery of psychological tests (MMPI, Rorschach, and a psychological interview; Rankin, 1957, 1959). The 1957 Rankin article was the first to appear in the literature attesting to any ongoing program of psychological assessment for police applicants (Gottesman, 1975).

During the late 1960s, personality assessment, psychological screening, and police psychology in general received an immense boost when the President's Commission on Law Enforcement and the Administration of Justice (1967) strongly recommended widespread use of psychological measures to determine the emotional stability of all potential officers. This recommendation was followed by the strong endorsement in 1968 by the National Advisory Commission on Civil Disorder that psychological screening would improve the emotional quality of individuals entering law enforcement (Scrivner, 1994). In keeping with Commission recommendations, Congress provided Law Enforcement Assistance Administration funds for law enforcement agencies to retain the services of mental health professionals. In 1973, the Police Task Force Report of the National Commission on Criminal Justice Standards and Goals encouraged the establishment of a behavioral sciences unit or consultant for all law enforcement agencies.

Shortly before then, in December 1968, Martin Reiser was hired by the Los Angeles Police Department as a full-time police psychologist. The evidence to date indicates that Reiser was the first full-time psychologist whose responsibilities were strictly police-related. Reiser (1982) himself is not entirely certain he was the first full-time police psychologist in the country. In 1969, he presented a paper at the Western Psychological Association Convention in Vancouver entitled "The Police Department Psychologist." This presentation may represent the "official" launch of contemporary North American police psychology. The paper was published in 1972. Reiser continued to be the most prolific writer on police psychology during the early 1970s. In 1972, in cooperation with the California School of Professional Psychology and the Los Angeles Police Department, he helped establish what is believed to be the first clinical internship in police psychology in the United States. By 1977, at least six other law enforcement agencies had hired full-time psychologists (Reese, 1986, 1987).

CRIMINAL PSYCHOLOGY

In the early years of the twentieth century, psychologists began to offer psychological perspectives on criminal behavior and to speculate about the causes of crime. Like the police psychology discussed earlier, criminal psychology is typically not considered in the narrow definitions of forensic

psychology, primarily because it appears more theoretical than clinical in nature. However, in its youth, criminal psychology was essentially clinical in nature, as the theories often centered on the measurable mental capacities of offenders.

Psychologists like Goddard had repeatedly found that most juvenile and adult offenders were mentally deficient, which led to the conclusion that a primary "cause" of crime and delinquency was intellectual limitation. In large part, this belief reflected the pervasive influence of Darwinism, which contended that humans differ only in degree from their animal brethren (and that some humans are closer to their animal ancestry than others). The mentally deficient were considered both intellectually and morally less capable of adapting to modern society. They presumably resorted to more "primitive" ways of meeting their needs, such as crime. These unfortunate conclusions, which did not take into account social conditions, cultural differences, or socialization processes, lent support to unconscionable practices such as lengthy incarceration of the disadvantaged, confused, and powerless.

In the history of psychology, few scholars have ventured to offer comprehensive theories on crime or delinquent behavior. Those who have (e.g., Eysenck, 1964) have often been strongly influenced by Darwinian thinking. Therefore, theoretical orientations focusing on mental deficiency or biological and constitutional dispositions have dominated early psychological criminology.

In the early 1960s, a psychological criminology distinct from psychiatric and more extensive than psychometrics began to show signs of life. Hans Toch (1961), who was also making significant contributions to correctional psychology, edited one of the first books on psychological criminology, Legal and Criminal Psychology. Some may argue that Hans Gross published the first criminal psychology book in 1898 (Kriminal psychologie), the same year in which he was appointed professor in ordinary for criminal law and justice administration at the University of Czernowitz in Austria. However, Gross was a lawyer by training, in practice, and in spirit and eventually became a successful judge. His book details his observations of offenders, witnesses, jurors, and judges but relies very little on psychological research. This is not surprising, of course, because psychology in 1898 was far from being an integrated discipline with a rich body of knowledge. Nevertheless, it is significant that Toch's book, published over 60 years later, represents the earliest attempt to integrate, in an interdisciplinary fashion, the empirical research of psychologists relevant to criminal behavior and legal issues.

British psychologist Hans J. Eysenck (1964), in *Crime and Personality*, formulated the first comprehensive theoretical statement on criminal behavior advanced by a psychologist. Shortly afterward, Edwin Megargee (1966) put forth his own heuristic statements regarding undercontrolled and overcontrolled personalities and their relationships to violence, a theory that then served as a basis for his classification system referred to earlier. Toch (1969) followed with *Violent Men*. The relationship between aggression and violence was studied seriously under the leadership of Leonard Berkowitz (1962), Albert Bandura (1973; Bandura & Walters, 1959), and later Robert Baron (1977). The psychopath became the subject of vigorous theory building and research in the hands of

Robert Hare (1970) and others (e.g., Quay, 1965) and continues as a rich research area to this day.

THE 1970S AND BEYOND

Since the 1970s, we have witnessed a literature and research explosion in all areas of forensic psychology. At this point, as Loh (1981) observed, forensic psychology had "come of age." In 1965, just over 100 English-language articles and books related to forensic psychology had been published (Tapp, 1976). By the mid-1970s, the numbers were well into the thousands. Professional journals exclusively devoted to forensic psychological research and issues were beginning to emerge in North America. Criminal Justice and Behavior led the way in 1974, followed by Law and Psychology Review (a journal published by law students and graduate psychology students at the University of Alabama) beginning in 1975, Law and Human Behavior in 1977, Behavioral Sciences & the Law in 1982, and Psychology, Public Policy, and Law in 1995. Great Britain followed suit with Criminal Behavior and Mental Health (launched in 1990), Psychology, Crime, & Law (1994), the British Psychological Society's Legal and Criminological Psychology (1996), and the Journal of Forensic Psychology Practice (2001). In addition to these, other interdisciplinary scholarly and scientific journals relevant to forensic psychology have emerged in recent years (e.g., Journal of Forensic Sciences, American Journal of Forensic Psychiatry, Journal of Psychiatry and Law).

During the 1970s, interdisciplinary and specialized training in forensic psychology was introduced at the doctoral, master's, internship, postdoctoral, and continuing education levels (Ogloff, Tomkins, & Bersoff, 1996). The first interdisciplinary, successful psychology and law program was developed by Bruce Sales at the University of Nebraska-Lincoln in 1974 (Ogloff et al., 1996). Other universities soon followed in this endeavor, some more successfully than others. Another indication of the growth in forensic psychology is professional certification of practitioners in the field, a development that began in the late 1970s. Beginning in 1978, board certification in forensic psychology was provided by the American Board of Forensic Psychology (Otto & Heilbrun, 2002). In recent years, other board certifications have emerged, such as the American College and Board of Forensic Examiners. In 2001, as noted earlier, the APA voted to recognize forensic psychology as a specialty. Forensic psychology has seen a rapid expansion in other parts of the globe besides North America, particularly in Europe and Australia. Blackburn (1996, p. 3), in the first issue of Legal and Criminological Psychology, asserted, "The growth in the number of forensic psychologists has been among the most prominent developments in the burgeoning application of psychology to law during the last two decades." He notes that, although the growth has been most apparent in the United States, there has been a parallel growth throughout Europe over the past 20 years.

After an uncertain beginning and some stagnation between the two World Wars, it is clear that forensic psychology is now well established. All indicators suggest that forensic psychology, whether viewed as a broad or a narrow field of research and practice, has an extremely promising future as we

continue into the twenty-first century. In the following chapters, other contributors assess forensic psychology's current status and the promise it holds for a future generation of researchers, practicing psychologists, theorists, and legal practitioners.

REFERENCES

Bandura, A. (1973). Aggression: A social learning analysis. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A., & Walters, R. H. (1959). Adolescent aggression. New York: Ronald Press.

Barland, G. H. (1988). The polygraph test in the U.S.A. and elsewhere. In A. Gale (Ed.), *The polygraph test: Lies, truth and science* (pp. 73–96). London: Sage.

Barnes, H. E., & Teeters, N. K. (1959). *New horizons in criminology* (2nd ed.). New York: Prentice-Hall. Baron, R. A. (1977). *Human aggression*. New York: Plenum Press.

Bartol, C. R., & Bartol, A. M. (2004). Introduction to forensic psychology. Thousand Oaks, CA: Sage.

Bartol, C. R., & Freeman, N. (2005). History of the American Association for Correctional Psychology. Criminal Justice and Behavior, 32, 123–142.

Benjamin, L. T. (2003). Behavioral science and the Nobel prize: A history. *American Psychologist*, 58, 731–741.

Berkowitz, L. (1962). Aggression: A social-psychological analysis. New York: McGraw-Hill.

Binet, A. (1900). La suggestibilite. Paris: Schleicher.

Binet, A. (1905). La science du termoignage [The science of testimony]. L'Annee Psychologique, 11, 128–137.

Binet, A., & Clarparede, E. (1906). La psychologie judiciaire [Legal psychology]. L'Anne Psychologique, 12, 274–302.

Blackburn, R. (1996). What is forensic psychology? Legal and Criminological Psychology, 1, 3-16.

Bodemar, O. A. (1956). Correctional psychology in Wisconsin. *Journal of Correctional Psychology*, 1, 7–15.

Bolton, F. E. (1896). The accuracy of recollection and observation. *Psychological Review*, 3, 286–295.

Brigham, J. C. (1999). What is forensic psychology anyway? Law and Human Behavior, 23, 273-278.

Britt, S. H. (1940). The rules of evidence: An empirical study in psychology and law. *Cornell Law Quarterly*, 25, 556–580.

Brodsky, S. L. (1973). *Psychologists in the criminal justice system*. Urbana: University of Illinois Press. Brodsky, S. L. (1996). Twenty years of criminal justice and behavior: An observation from the beginning. *Criminal Justice and Behavior*, 23, 5–11.

Brown, M. (1926). Legal psychology. Indianapolis, IN: Bobbs-Merrill.

Brown v. Board of Education, 347 U.S. 483 (1954).

ogy, 4, 41-52.

Bryan, A. I., & Boring, E. G. (1946). Women in American psychology: Statistics from the OPP questionnaire. *American Psychologist*, 1, 71–79.

Burtt, H. E. (1931). Legal psychology. New York: Prentice-Hall.

Cady, H. M. (1924). On the psychology of testimony. *American Journal of Psychology, 35,* 110–112. Cairns, H. (1935). *Law and the social sciences*. New York: Harcourt, Brace.

Cattell, J. M. (1895). Measurements of the accuracy of recollection. Science, 2, 761-766.

Clements, C. B. (1996). Offender classification: Two decades of progress. Criminal Justice and Behavior, 23, 121–143.

Coca-Cola Company v. Chero-Cola Company. 273 Fed. 755 (App. D.C. 1921).

Comment. (1979). The psychologist as expert witness: Science in the courtroom? *Maryland Law Review*, *38*, 539–615.

Corsini, R. (1945). Functions of the prison psychologist. *Journal of Consulting Psychology*, 9, 101–104. Darley, J. G., & Berdie, R. (1940). The fields of applied psychology. *Journal of Consulting Psychology*.

Eysenck, H. J. (1964). Crime and personality. London: Routledge & Kegan Paul.

Fass, P. (1993). Making and remaking an event: The Leopold and Loeb case in American culture. *Journal of American History*, 80, 919–951.

Frye v. United States, 54 App. D.C. 46, 47 293 F. 1013, 1014 (1923).

Giardini, G. I. (1942). The place of psychology in penal and correctional institutions. *Federal Probation*, *6*, 29–33.

Glaser, D. (1964). *The effectiveness of a prison and parole system*. Indianapolis, IN: Bobbs-Merrill. Goddard, H. H. (1914). *Feeblemindedness: Its causes and consequences*. New York: Macmillan.

Gottesman, J. (1975). The utility of the MMPI in assessing the personality patterns of urban police applicants. Hoboken, NJ: Stevens Institute of Technology.

Greenberg, J. (1956). Social scientists take the stand: A review and appraisal of their testimony in litigation. *Michigan Law Review*, 54, 953–970.

Hale, M. (1980). *Human science and social order: Hugo Münsterberg and origins of applied psychology.* Philadelphia: Temple University Press.

Hare, R. D. (1970). Psychopathy: Theory and research. New York: Wiley.

Herman, E. (2001). How children turn out and how psychology turns them out. History of Psychology, 4, 297–316.

Hess, A. (1987). Dimensions of forensic psychology. In I. B. Weiner & A. K. Hess (Eds.), Hand-book of forensic psychology (pp. 22–49). New York: Wiley.

Hess, A. (1999). Defining forensic psychology. In A. K. Hess & I. B. Weiner (Eds.), Handbook of forensic psychology (2nd ed., pp. 24–47). New York: Wiley.

Hidden v. Mutual Life Insurance Co., 217 F.2d 818 (4th Cir. 1954).

Horowitz, I. A., & Willging, T. E. (1984). *The psychology of law: Integration and applications*. Boston: Little, Brown.

Hutchins, R. M., & Slesinger, D. (1927). Some observations on the law of evidence: Consciousness of guilt. *University of Pennsylvania Law Review*, 77, 725–740.

Hutchins, R. M., & Slesinger, D. (1928a). Some observations on the law of evidence: The competency of witnesses. *Yale Law Journal*, *37*, 1017–1028.

Hutchins, R. M., & Slesinger, D. (1928b). Some observations of the law of evidence: Memory. *Harvard Law Review*, 41, 860–873.

Hutchins, R. M., & Slesinger, D. (1928c). Some observations of the law of evidence: Spontaneous exclamations. *Columbia Law Review*, 28, 432–440.

Hutchins, R. M., & Slesinger, D. (1929). Legal psychology. Psychological Review, 36, 13-26.

Jackson, J. P. (2000). The triumph of the segregationists? A historiographical inquiry into psychology and the *Brown* litigation. *History of Psychology*, *3*, 239–261.

Jenkins v. United States, 307 F.2d 637 (D.C. Cir. 1962) en banc.

Jesness, C. (1971). Jesness Inventory Classification System. Criminal Justice and Behavior, 15, 78–91.

Keller, E. I. (1918). Psychopathic laboratory at police headquarters, New York City. Journal of Applied Psychology, 2, 84–88.

Kelves, D. J. (1984, October 15). Annals of eugenics, II. New Yorker, 52-125.

Kluger, R. (1975). Simple justice. New York: Knopf.

Kuna, D. P. (1978). One-sided portrayal of Münsterberg. American Psychologist, 33, 700.

Landy, F. J. (1992). Hugo Münsterberg: Victim or visionary? Journal of Applied Psychology, 77, 787-802.

Lindner, H. (1955). The work of court and prison psychologists. In G. J. Dudycha (Ed.), *Psychology for law enforcement officers*. Springfield, IL: Charles C. Thomas.

Loh, W. D. (1981). Perspectives on psychology and law. *Journal of Applied Social Psychology*, 11, 314-355.

Louisell, D. W. (1955). The psychologist in today's legal world: Part I. Minnesota Law Review, 39, 235–260.

Louisell, D. W. (1957). The psychologist in today's legal world: Part II. *Minnesota Law Review*, 41, 731–750.

Marston, W. M. (1917). Systolic blood pressure changes in deception. *Journal of Experimental Psychology*, 2, 117–163.

Marston, W. M. (1920). Reaction-time symptoms of deception. *Journal of Experimental Psychology*, 3, 72–87.

Marston, W. M. (1921). Psychological possibilities in deception tests. *Journal of the American Institute of Criminal Law and Criminology*, 11, 551–570.

Marston, W. M. (1924). Studies in testimony. Journal of Criminal Law and Criminology, 15, 5-32.

Marston, W. M. (1925). Negative type reaction-time symptoms of deception. Psychological Review, 32, 241–247.

McCary, J. L. (1956). The psychologist as an expert witness in court. *American Psychologist*, 11, 8–13. McCarty, D. G. (1929). *Psychology for the lawyer*. New York: Prentice-Hall.

Megargee, E. I. (1977). A new classification system for criminal offenders. *Criminal Justice and Behavior*, 4, 107–114.

Merrill, M. A. (1927). Intelligence of policemen. Journal of Personnel Research, 5, 511-515.

Miller, H. L., Lower, J. S., & Bleechmore, J. (1978). The clinical psychologist as an expert witness on questions of mental illness and competency. *Law and Psychology Review*, *4*, 115–125.

Monahan, J., & Loftus, E. F. (1982). The psychology of law. Annual Review of Psychology, 33, 441-475.

Moskowitz, M. J. (1977). Hugo Münsterberg: A study in the history of applied psychology. American Psychologist, 32, 824–842.

Münsterberg, H. (1899/1994). Psychology and history. Psychological Review, 101, 230-236.

Münsterberg, H. (1908). On the witness stand: Essays on psychology and crime. New York: McClure.

Münsterberg, H. (1914). Psychology and social sanity. New York: Doubleday, Page.

Napoli, D. S. (1981). Architects of adjustment. Port Washington, NY: Kennikat.

Odom v. State, 174 Ala. 4, 7, 56 So. 913, 914 (1911).

Oglesby, T. W. (1957). Use of emotional screening in the selection of police applicants. *Public Personnel Review*, 18, 228–231, 235.

Ogloff, J. R. P., Tomkins, A. J., & Bersoff, D. N. (1996). Education and training in psychology and law/criminal justice. *Criminal Justice and Behavior*, 23, 200–235.

Otto, R. K., & Heilbrun, K. (2002). The practice of forensic psychology: A look toward the future in light of the past. *American Psychologist*, *57*, 5–19.

Paterson, D. G. (1940). Applied psychology comes of age. *Journal of Consulting Psychology*, 4, 1–9. People v. Hawthorne, 293 Mich. 15, 291 N.W. 205 (1940).

President's Commission on Law Enforcement and the Administration of Justice. (1967). *Task force report: The police*. Washington, DC: USGPO.

Quay, H. C. (1965). Psychopathic personality: Pathological stimulation-seeking. American Journal of Psychiatry, 122, 180–183.

Rankin, J. H. (1957). Preventive psychiatry in the Los Angeles Police Department. Police, 2, 24–29.

Rankin, J. H. (1959). Psychiatric screening of police recruits. Public Personnel Review, 20, 191-196.

Reese, J. T. (1986). Foreward. In J. T. Reese & H. Goldstein (Eds.), *Psychological services for law enforcement* (p. v). Washington, DC: USGPO.

Reese, J. T. (1987). A history of police psychological services. Washington, DC: USGPO.

Reiser, M. (1972). The police psychologist. Springfield, IL: Charles C. Thomas.

Reiser, M. (1982). Police psychology: Collected papers. Los Angeles: LEHI.

Resnick, R. J. (1997). A brief history of practice—expanded. American Psychologist, 52, 463-468.

Robinson, E. S. (1935). Law and the lawyers. New York: Macmillan.

Rogers, O. (1910). The unwary purchaser: A study in the psychology of trademark infringement. Michigan Law Review, 8, 613–644.

Rogers, O. (1918). An account of some psychological experiments on the subject of trademark infringements. *Michigan Law Review*, *18*, 75–95.

Schrenck-Notzing, A. (1897). *Uber suggestion und erinnerungsfalschung im berchtholdprocess*. Leipzig: Johann Ambrosius Barth.

Scrivner, E. M. (1994). The role of police psychology in controlling excessive forces. Washington, DC: National Institute of Justice.

Shartle, C. L. (1946). Occupations in psychology. American Psychologist, 1, 559–582.

Slesinger, D., & Pilpel, M. E. (1929). Legal psychology: A bibliography and a suggestion. Psychological Bulletin, 12, 677–692.

Snee, T. J., & Lush, D. E. (1941). Interaction of the narrative and interrogatory methods of obtaining testimony. *Journal of Psychology*, 11, 225–236.

State v. Driver, 88 W. Va. 479, 107 S. E. 189 (1921).

Stern, L. W. (1906). Zur psychologie der aussage. Zeitschrift fur die gesamte Strafrechswissenschaft, 23, 56-66.

Stern, L. W. (1910). Abstracts of lectures on the psychology of testimony. American Journal of Psychology, 21, 273–282.

Stern, L. W. (1939). The psychology of testimony. *Journal of Abnormal and Social Psychology*, 40, 3–20. Tapp, J. L. (1976). Psychology and the law: An overture. *Annual Review of Psychology*, 27, 359–404.

Terman, L. M. (1917). A trial of mental and pedagogical tests in a civil service examination for policemen and firemen. *Journal of Applied Psychology*, 1, 17–29.

Terrio, L., Swanson, C. R., Jr., & Chambelin, N. C. (1977). The police personnel selection process. Indianapolis, IN: Bobbs-Merrill.

Thurstone, L. L. (1922). The intelligence of policemen. Journal of Personnel Research, 1, 64-74.

Toch, H. (Ed.). (1961). Legal and criminal psychology. New York: Holt, Rinehart & Winston.

Toch, H. (1969). Violent men: An inquiry into the psychology of violence. Chicago: Aldine.

Toch, H. (1992). Functional unit management: An unsung achievement. Federal Prisons Journal, 2, 15–19.

Viteles, M. S. (1929). Psychological methods in the selection of patrolmen in Europe. *Annals of the American Academy*, 146, 160–165.

Watkins, R. E. (1992). An historical review of the role and practice of psychology in the field of corrections. Ottawa: Correctional Service of Canada.

- Weld, H. P., & Danzig, E. R. (1940). A study of the way in which a verdict is reached by a jury. *American Journal of Psychology*, 53, 518–536.
- Weld, H. P., & Roff, M. (1938). A study in the formation of opinion based upon legal evidence. *American Journal of Psychology*, 51, 609–628.
- Whipple, G. M. (1909). The observer as reporter: A survey of the "psychology of testimony." *Psychological Bulletin*, 6, 153–170.
- Whipple, G. M. (1910). Recent literature on the psychology of testimony. *Psychological Bulletin*, 7, 365–368.
- Whipple, G. M. (1911). Psychology of testimony. Psychological Bulletin, 8, 307–309.
- Whipple, G. M. (1912). Psychology of testimony and report. Psychological Bulletin, 9, 264-269.
- Whipple, G. M. (1913). Psychology of testimony and report. Psychological Bulletin, 10, 264-268.
- Whipple, G. M. (1914). Psychology of testimony and report. Psychological Bulletin, 11, 245-250.
- Whipple, G. M. (1915). Psychology of testimony. Psychological Bulletin, 12, 221–224.
- Whipple, G. M. (1917). Psychology of testimony. Psychological Bulletin, 14, 234–236.
- Wigmore, J. H. (1909). Professor Münsterberg and the psychology of testimony: Being a report of the case of *Cokestone v. Münsterberg*. *Illinois Law Review*, 3, 399–445.
- Wigmore, J. H. (1940). Evidence in trials at common law. Boston: Little, Brown.
- Winick, C. (1961). The psychology of juries. In H. Toch (Ed.), *Legal and criminal psychology* (pp. 96–120). New York: Holt, Rinehart and Winston.