CHAPTER

1

Historical Overview of Risk Assessment

Societies have always had methods of identifying and containing individuals who appeared to put the community at risk. However, it was not until the nineteenth century that scientists entered the field of assessing dangerousness. In the late 1800s, the Italian positivist school of criminology, led by Cesare Lombroso, developed the theory of atavism. According to Lombroso, violent criminals were really throwbacks to primitive humans and could generally be identified by their physical characteristics. Once identified, the punishment should be designed to fit the criminal, not the crime. Lombroso's expert testimony generally advocated that those he identified as throwbacks be permanently contained, or even executed, because they would forever be a menace to the community.

As the positivist movement grew into the twentieth century, the focus changed from containment to treatment. Perhaps criminals who had been identified could be rehabilitated, authorities conceded, but it would take a lengthy period of time, and sentences needed to be indeterminate. This "rehabilitative/incapacitation model" continued to predominate well into the 1970s (Melton, Petrila, Poythress, & Slobogin, 1997, p. 251).

During the 1930s, society began turning to the medical community for explanations of and solutions to criminality. In 1936, Dr. James Pritchard coined the term "moral insanity" to describe people

who had a poorly formed conscience but otherwise appeared to function adequately (Conroy, 2003). Shortly thereafter, Hervey Cleckley (1941) published his first edition of *The Mask of Sanity,* in which he described individuals who ultimately became known as "psychopaths." Although these individuals appeared intelligent and clearly were not psychotic, they also presented severe social problems, in that they appeared to have little empathy for others or remorse for harmful behaviors. These medical explanations for crime quickly influenced the legal system. A prime example was the advent of the sexual psychopath laws. In a rare show of unity, medical professionals, the press, and the anxious public optimistically embraced the idea that psychopaths, at risk for sexually assaulting the innocent, could be easily identified and successfully treated (Lieb, Quinsey, & Berliner, 1998). The sexual psychopath statutes were considered humane and enlightened, and by the mid-1960s, 26 states had enacted such laws (Lieb et al., 1998).

The 1960s, however, began an era of disillusionment with medical solutions to violence. The movement away from indefinite hospitalization of the mentally ill and toward treatment in the community gained strength. Thomas Szasz (1963) offered a series of popular books in which he castigated the medical community for diagnosing and confining individuals who were simply deviant. He declared the concept of mental illness to be a myth and psychiatric treatment to be a hoax. The public became concerned both about unnecessary restrictions on individual civil liberties and unnecessary expenses to the taxpayer.

First-Generation Research on the Prediction of Dangerousness

For more than half a century preceding the 1970s, civil commitment of the mentally ill had become increasingly easy. Civil commitment was understood to be a *parens patriae* action in which the state was fulfilling its obligation to care for citizens who could not care for themselves. In many places, one could be civilly committed simply with the signature of one or two physicians. Even if courts were involved, they generally showed great deference to medical

judgment. By 1970, 31 states had statutes allowing physicians to confine people to hospitals simply because they allegedly needed treatment (Melton et al., 1997).

However, in the decade that followed, courts began to take a harder look at commitment laws and generally found that a need for treatment, by itself, was not sufficient to severely curtail one's civil liberties. In *O'Connor v. Donaldson* (1975), the U.S. Supreme Court held that it was unconstitutional to confine a nondangerous person who was capable of self-care. Nonetheless, the court continued to insist on clinical expertise to assess illness and predict danger to self or others, saying that the relevant evidence in such cases "turns on the meaning of the facts which must be interpreted by expert psychiatrists and psychologists" (*Addington v. Texas,* 1979).

Meanwhile, mental health professionals raised questions about the legality and the practical viability of clinical assessments of violence risk. Saleem Shah (1975), a key figure in shaping policy and practice related to law and mental health, initially argued strongly that the law should not ask clinicians to make predictions regarding a psychiatric patient's potential dangerousness. He emphasized that dangerousness was poorly defined, restrictions on patients' freedom were severe, and clinician accuracy was poor.

Yet in this era of controversy, several opportunities fortuitously arose for researchers to assess clinicians' abilities to predict dangerousness. The first followed a U.S. Supreme Court decision (*Baxstrom v. Herald,* 1966) that resulted in the release or transfer of many psychiatric patients whom clinicians had predicted to be dangerous. In a 4-year follow-up study, only 20% of the releasees were found to be assaultive either in a civil hospital or in the community (Steadman & Cocozza, 1974). A similar study followed a group of patients released against medical advice from Bridgewater State Hospital in Massachusetts. Although the assault rate among those predicted to be dangerous was considerably higher than for patients not predicted to be dangerous, the false-positive rate (i.e., those predicted to be dangerous who, given opportunity, were not) still exceeded 65% (Kozol, Boucher, & Garofolo, 1972). In 1976, Cocozza and Steadman followed 257 indicted felony defendants found incompetent and released in New York; they found that 14% of those predicted to be dangerous were rearrested for assault, as

compared to 16% of those thought not to be dangerous. A subsequent study of patients released from the Patuxent Institute in Maryland revealed a 58% false-positive rate in terms of patients whom clinicians had predicted to be violent (Steadman, 1977). This finding eventually led the state of Maryland to abolish its Defective Delinquent statute.

Following the case of *Dixon v. Attorney General of the Commonwealth of Pennsylvania* (1971), Thornberry and Jacoby (1979) found a false positive rate of 86% among releasees originally predicted to be dangerous. Investigating a Canadian sample, Quinsey, Warneford, Pruesse, and Link (1975) followed 91 male patients discharged against medical advice from a maximum-security mental health center in Ontario directly to the community. Over a 3-year period, only 17% committed a violent offense.

To examine the process involved in predicting dangerousness, Pfohl (1978) studied 12 teams of mental health professionals at a forensic hospital in Lima, Ohio. These teams used no specific, universal criteria to reach conclusions about dangerousness. Predictions appeared to be influenced by a wide variety of theoretical orientations. Explaining what they considered most important in making their predictions, the clinicians listed factors that ranged from the subject's past criminal record to whether they would be comfortable with the examinee living next door to them.

Taken together, these field studies strongly suggested that clinicians labeled dangerous many people who, given the opportunity, hurt no one. However, methodological problems plagued this research. First, given the large number of people released simultaneously, it is doubtful that those sent directly to the community could be consistently located for long-term follow-up. Second, much of the research was done with patients who were institutionalized and treated for a number of years following the prediction that they would be dangerous (Klassen & O'Connor, 1988). Third, most studies relied on official criminal records that were prone to gross underestimation of actual violence (Douglas & Webster, 1999). Fourth, the operational definition of violence was often unclear and/or inconsistent from one study to another (Monahan, 1981). Finally, it was unclear whether the original predictions of dangerousness were really clinical at all, or whether clinicians had simply

endorsed administrative decisions for political reasons (Litwack & Schlesinger, 1999).

Methodological flaws like these made any conclusions about the exact percentage of false positives impossible. However, taken together, the data did support the general conclusion that violence among mentally disordered people was not as common as anticipated and that the predictions of dangerous behavior that mental health professionals offered were not particularly reliable. Prominent scholars in the field concluded that the mental health profession was incapable of predicting dangerousness with any reasonable degree of accuracy (American Psychiatric Association, 1974; American Psychological Association, 1978; Cocozza & Steadman, 1976; Megargee, 1981; Shah, 1975). The situation prompted Monahan (1981, 1984) to call for a new generation of better-focused, better-planned research.

The Courts Speak

As social scientists, mental health professionals, and some legal scholars (e.g., Dershowitz, 1969; Dix, 1977) decried the gross inaccuracy of violence prediction, the courts steadfastly held that the problem was not insurmountable. In 1976, the Supreme Court of California, while acknowledging that prediction of dangerousness was far from perfect, still issued the opinion that clinicians had a "duty to warn" third parties about a potentially dangerous client (*Tarasoff v. The Regents of the University of California*). Their opinion clearly implied that the court assumed clinicians should be able to make reasonable predictions of violence. That same year, the U.S. Supreme Court declared that violence prediction in a death penalty case could be reasonably accomplished (*Jurek v. Texas,* 1976).

The case most directly addressing the issue of mental health professionals predicting dangerousness came before the U.S. Supreme Court in 1983 (*Barefoot v. Estelle*). Based in part on the testimony of a psychiatrist regarding future dangerousness, a Texas defendant convicted of murder received the death penalty. The American Psychiatric Association (1983) went so far as to submit an *amicus curiae* brief to the Court arguing that psychiatric predictions of

dangerousness were notoriously inaccurate—in fact, wrong as often as 2 out of 3 times. Although the justices acknowledged the brief, as well as the work done by John Monahan (1981), they were not persuaded. Instead, they explained:

> The suggestion that no psychiatrist's testimony may be presented with respect to a defendant's future dangerousness is somewhat like asking us to disinvent the wheel. In the first place, it is contrary to our cases. If the likelihood of a defendant's committing further crimes is a constitutionally acceptable criterion for imposing the death penalty, which it is, *Jurek v. Texas,* 428 U.S. 262 (1976), and if it is not impossible for even a layperson sensibly to arrive at that conclusion, it makes little sense, if any, to submit that psychiatrists, out of the entire universe of persons who might have an opinion on the issue, would know so little about the subject that they should not be permitted to testify. (*Barefoot v. Estelle,* 1983, p. 897)

In the 2 decades that followed, courts and the criminal justice system continued to rely on mental health professionals to assess risk for violence. In *Schall v. Martin* (1984), a case regarding the detention of a juvenile, the U.S. Supreme Court very specifically rejected the contention that it was impossible to reliably predict future criminal behavior. In 1987, the Court came to a similar conclusion in a case regarding preventive detention of adults (*U.S. v. Salerno*). More recently, the Court ruled that civil commitment of a previously incarcerated sexual offender as a "sexually violent predator" required a prediction of future dangerousness, as well as a finding that the person's control of dangerous behavior was impaired (*Kansas v. Hendricks,* 1997). At the present time, all 50 states incorporate "dangerous to others" into their civil commitment criteria (Douglas & Webster, 1999). Both types of civil commitment typically rely on the testimony of mental health professionals.

A Shift in the Paradigm

In 1954, Meehl composed a thoughtful and highly influential treatise distinguishing clinical from statistical methods of prediction,

pointing out the general superiority of the latter. Although a number of researchers in the social sciences agreed with his perspective, they realized that there were few statistical data available on which to base violence risk prediction models (Monahan, 1981). However, the high publicity surrounding the poor reliability of dangerousness predictions, coupled with court demands for such predictions, apparently energized mental health scholars. Even those who had initially argued to abolish dangerousness predictions appeared to accept that the law would continue to demand such predictions, and they went about working toward making such predictions as empirically and ethically rigorous as possible (Shah, 1981; see also Lidz & Mulvey, 1995). In the 2 decades following the *Barefoot v. Estelle* decision, research on violence risk assessment grew exponentially. Individual researchers and research groups began studying factors thought to be predictive of future violence (Douglas & Webster, 1999; Klassen & O'Connor, 1988; Webster, Harris, Rice, Cormier, & Quinsey, 1994). Two long-term research programs to study violence prediction began in the late 1980s. One was funded through a grant from the National Institute of Mental Health to Lidz and Mulvey at the University of Pittsburgh. The second was the MacArthur Risk Study, funded by the John D. and Catherine T. MacArthur Foundation. This effort began with 12 active researchers from the fields of law, psychiatry, psychology, and sociology.

As research progressed, the paradigm began to shift from a dichotomy to a continuum, from the yes/no prediction of a violent act ("dangerousness prediction") to an assessment of risk ("risk assessment"). The latter acknowledged that one could not predict, or eliminate, the possibility of future violent behavior with certainty. Rather, the goal became estimating the degree of risk an individual posed. Research has demonstrated that clinicians generally do not think in absolutes, but in terms of contingent conditions (Mulvey & Lidz, 1988). Risk assessment is a broad decision-making concept that calls for evaluators to combine a complex array of data. It generally implies an ongoing process and not simply a single, one-time definitive conclusion (as had the dangerousness prediction). Thinking in terms of risk allowed for decisions that balanced the seriousness of the outcome with the probability of its occurrence (Steadman et al., 1993). It encouraged evaluators to consider context, nomothetic

research data, individual history, anticipated situations, and clinical symptoms. Importantly, the shift from dangerousness prediction to violence risk assessment occurred as scholars began to understand violence as a public health concern (Douglas & Webster, 1999; Mercy & O'Carroll, 1988).

Learning to Measure the Risk

Research over the past 20 years has tended to focus not on whether violent acts can be predicted, but on how to measure degrees of risk. Some scholars accepted the position first developed by Meehl (1954) and later articulated by Grove and Meehl (1996) that actuarial methods were consistently superior to clinical judgment. Some went so far as to say that clinical judgment should be completely eliminated from the process of assessing risk. Recently, Quinsey, Harris, Rice, and Cormier (2006, p. 197) reaffirmed their position:

> We again call on clinicians to do risk appraisal in a new way—a way different from that in which most of us were trained. What we are advising is not the addition of actuarial methods to existing practice, but rather the replacement of existing practice with actuarial methods. . . . Actuarial methods are too good and clinical judgment is too poor to risk contaminating the former with the latter.

Others defended, with equal intensity, the use of clinical judgment:

> It is hard to imagine that the day will ever come when actuarial assessments of dangerousness can properly and completely substitute for clinical assessments. That is because actuarial predictors cannot be validated regarding those subsets of supposedly dangerous individuals who are confined (e.g., emergency civil committees) or not released (e.g., supposedly dangerous insanity acquittees) on the basis of decisions by clinicians or judges. Moreover, as of yet, actuarial schemes for assessing dangerousness have not been proven to be generally superior to clinical assessments. (Litwack, 2001, p. 437)

One prominent study of clinicians working in a psychiatric emergency room seemed to suggest that clinical judgment had been considerably undervalued (Lidz, Mulvey, & Gardner, 1993).

One difficulty in this clinical versus actuarial debate has been the definition of clinical judgment. It is perhaps easier to say what clinical judgment is not: exclusive reliance on an actuarial formula. Beyond that, however, is clinical judgment limited to the interview process? Does it include the addition of collateral information? Does clinical judgment employ psychological testing? Does it rely on research data? What about behavioral observations? Is clinical judgment only that which is "subjective" or "impressionistic" (Grove & Meehl, 1996)? Should making clinical inferences to assign numerical scores to a structured measure (e.g., the Psychopathy Checklist—Revised; Hare, 1991, 2003) be considered clinical judgment? Without a consistent, universally accepted definition of clinical judgment,* efforts to study clinical judgment have suffered.

Over time, several scholars suggested that clinical versus actuarial methods may be not a dichotomy, but a continuum. Hanson (1998), for example, suggested that there may be room between pure actuarial and pure clinical assessments for guided clinical judgment or adjusted actuarial assessments. He described guided clinical judgment as assessments that include "a range of empirically validated risk indicators and then make recidivism estimates on the basis of the offender's rankings on these factors and the expected base rates for similar offenders" (pp. 61–62). Adjusted actuarial assessment was defined as an approach that "begins with actuarial predictions and

* One recent line of research in clinical psychology highlights some of the confusion surrounding "clinical judgment." Westen and Weinberger (2004) recently argued that the broad debate regarding clinical versus statistical prediction reveals considerable misunderstanding among those involved. Specifically, they argued, Meehl (1954) was clear and consistent in defining *clinical* as a means of aggregating data by unstructured human judgment (as opposed to actuarial methods, defined as statistically aggregating data, often using algorithms that are refined with continued study). And indeed, actuarial methods of combining data almost always outperform clinical methods of combining data. However, some clinicians have mistakenly come to believe that research shows clinicians themselves (or the observations and inferences that clinicians offer) to be demonstrably inferior to actuarial methods of data collection. In actuality, Westen and Weinberger argued, considerable evidence supports clinicians' ability to make specific inferences and observations; these observations and inferences, then, are best aggregated using a structured measure.

then adjusts these assessments on the basis of other compelling evidence" (p. 65). Conceptualized in this way, clinicians may not need to limit themselves to only one or two narrowly defined methods.

The Development of Instruments

Regardless of their individual positions on the value of clinical judgment, psychologists have concentrated vast energy over the past decades on developing instruments to measure psychological constructs. Lengthy catalogues of psychological tests are available to measure every construct, from eye-hand coordination to delusional thinking. Risk assessment presented an ideal area for test developers, given the measurable criterion variable and the need for defensible approaches to the task.

One of the first psychometric devices that proved to be of significant value in efforts to assess risk was the Psychopathy Checklist (later the Psychopathy Checklist—Revised [PCL-R]), developed by Robert Hare (1991, 2003) and his colleagues. It is important to emphasize that the Psychopathy Checklist was *not* developed as a risk assessment device. Rather, the instrument was designed to measure a specific personality construct that Hare and Hart (1993, p. 104) defined as:

> a cluster of personality traits and socially deviant behaviors: glib and superficial charm; egocentricity; selfishness; lack of empathy, guilt, and remorse; deceitfulness and manipulativeness; lack of enduring attachment to people, principles, or goals; impulsive and irresponsible behavior; and a tendency to violate explicit social norms.

The description was intentionally similar to the personality described by Cleckley in 1941. Perhaps not surprisingly (at least in retrospect), studies found that high scores on the PCL-R were significantly related to future violent acts (Hare, 2003; G. T. Harris, Rice, & Cormier, 1991; Serin & Amos, 1995).

Whereas the PCL-R was a psychometric instrument designed to assess a personality construct, it was followed by a series of

measures that were quite specific to measuring the probability of future violent behavior. The Violence Prediction Scheme (Webster et al., 1994) was among the earliest efforts, followed by the Violence Risk Appraisal Guide (VRAG; Quinsey, Harris, & Cormier, 1998; Quinsey et al., 2006).* Almost simultaneously, Webster, Douglas, Eaves, and Hart (1997a) published the Historical, Clinical, Risk Scheme (HCR-20). Although more a guide than an actuarial measure, this measure provided a list of well-researched variables to be used in assessing the probability of future violence. It should be noted that both the VRAG and the HCR-20 rely on PCL-R results as one element. One additional instrument, the Level of Service Inventory (later the Level of Service Inventory—Revised; Andrews & Bonta, 1995), was designed to measure not only risk but also service needs.

Researchers quickly acknowledged that not all forms of violence were alike, nor were the perpetrators of violence. Actuarial instruments soon emerged to address specifically sex offender recidivism (e.g., the Sex Offender Risk Appraisal Guide: Quinsey et al., 2006; the Sexual/Violence/Risk Instrument: Boer, Hart, Kropp, & Webster, 1997; the Rapid Risk Assessment for Sexual Offense Recidivism: Hanson, 1997; the STATIC-99: Hanson & Thornton, 1999; the Minnesota Sex Offender Screening Tool—Revised: Epperson, Kaul, & Hesselton, 1998b), spousal abuse (the Spousal Assault Risk Assessment Guide: Kropp, Hart, Webster, & Eaves, 1995), and forms of violence risk among juveniles (the Youth Level of Service/Case Management Inventory: Hoge & Andrews, 1994; the Juvenile Sex Offender Assessment Protocol: Prentky, Harris, Frizzell, & Righthand, 2000; the Estimate of Risk of Adolescent Sexual Offense Recidivism: Worling, 2004). A youth version of Hare's Psychopathy Checklist also became commercially available recently (Forth, Kosson, & Hare, 2003). Finally, a unique approach using a decision tree methodology (and incorporating a PCL-R score) was developed by the MacArthur group (Steadman et al., 2000) for use with psychiatric patients. This complex methodology resulted in a computer software program called Classification of Violence Risk

* All instruments mentioned in this section are described in greater detail in Appendix A. Some are also discussed throughout this text.

(Monahan et al., 2006), now available from Psychological Assessment Resources Inc., to assist the practitioner.

Advances in Methodology and Analysis

As instruments developed, statistical methods used in risk assessment research also improved. Like other fields, risk assessment benefited from the increasing popularity and sophistication of meta-analytic techniques. Meta-analysis allows scholars to combine many small studies of the same issue, yielding large samples and numerous variables for the final analysis. For example, Hanson and Bussiere (1998) investigated 69 potential predictors of sexual recidivism, 38 predictors of other violent recidivism, and 58 predictors of any recidivism, with a total subject pool of 28,972 sexual offenders across 61 studies.

Like other fields that study prediction tasks, the field of risk assessment initially relied on indices of predictive accuracy derived from the 2×2 contingency table. The table allows one to calculate true positives (those predicted to be violent who were subsequently violent), true negatives, false positives (those predicted to be violent who subsequently were not), and false negatives. However, this method is very dependent on sample base rates and so may obscure the real predictive performance (Mossman, 1994).

In an attempt to solve this problem, researchers borrowed a methodology from signal detection theory known as receiver operating characteristic (ROC) analysis. The area under the curve (AUC) in this analysis can provide a way of judging the overall accuracy of the predictor or instrument that is less dependent on base rates. It also provides a convenient metric to compare accuracy across various instruments. The AUC can range from 0 (perfect negative prediction) to .50 (chance) to 1.0 (perfect positive prediction). Using ROC analysis, the particular cutoff point chosen could be based on the relative costs of false negatives versus false positives (Rice & Harris, 1995). Costs could be defined by representatives of the affected community. For example, in the case of predicting whether a juvenile is apt to become involved in a fight in the class-

room, one might decide that the consequences of a false negative (having to break up the fight) may not be as serious as a false positive (removing a child from the classroom who would actually be nonviolent). On the other hand, if the issue were preventing homicide in a maximum-security prison, the consequences of a false negative (a homicide) might be of much greater concern than the consequences of a false positive (maintaining an individual in administrative segregation).

Over the past 2 decades many risk assessment researchers have also turned to survival curve analysis (Braun & Zwick, 1993; Greenhouse, Stangl, & Bromberg, 1989). Survival analysis differs from the use of percentages or correlations in that it allows researchers to consider the time at risk. This can be significant, given that some offenders reoffend very quickly, whereas others may be in the community for long periods of time before reoffending. Using survival curves, groups of offenders can be compared to determine which type of offender is apt to offend over what period of time. For example, Serin and Amos (1995) compared psychopaths to nonpsychopaths and mixed offenders to establish the likelihood of reoffense over time.

Risk Management

Researchers have long advocated considering violence risk in context and revising assessments over time (Monahan & Steadman, 1994). In 1997, Heilbrun, in a seminal article, outlined two ways of considering risk: from an assessment perspective and from a management perspective. The goal of the first was to determine the risk or probability of a violent event occurring; the goal of the second was to reduce that probability. Despite the tremendous progress made in violence risk assessment technology in recent years, relatively few scientific data relate directly to managing, that is, reducing risk (Douglas & Skeem, 2005).

In 2000, Skeem, Mulvey, and Lidz characterized risk assessment research to date as "developing and applying a maximally predictive, context free algorithm for combining individually based risk factors" (p. 608). Actuarial instruments usually belie an implicit

assumption that the risk for a given individual would be the same regardless of the situation, the environment, or the time frame. Yet research indicates that context does matter. Studies in which mental health professionals were asked to predict violence in an institution on a short-term basis suggest that relying on factors predictive of violence in the community on a longer term basis can lead to high rates of false positives (R. Cooper & Werner, 1990; P. T. Werner, Rose, Yesavage, & Seeman, 1984). Many people appear to behave quite differently in the confines of a secure institution than they would in the community, and different contexts provide different opportunities for violence. However, institution versus community is a crude categorization, and actual situational variability tends to be even more complex. Mulvey and Lidz (1995) stressed the need for a "conditional model" of risk, one that could adjust with changing circumstances.

In addition to context, risk reduction requires that evaluators examine factors that are subject to change and/or receptive to intervention. However, initial research and actuarial instruments (e.g., VRAG, STATIC-99) emphasized factors that were static, or historical. For example, researchers focused on factors such as past history of violence, age at which violent behavior began, history of substance abuse, and characteristics of prior victims (Hanson & Bussiere, 1998; Quinsey et al., 2006). Although these were found to be important in terms of making one-time, long-term predictions, they were of little value in determining the likelihood of violence on a day-to-day basis or deciding what interventions might be effective in altering behavior. The factors that determine risk status (i.e., whether one is generally at higher risk for violence) may be different from the factors that determine risk state (i.e., whether one is at risk for violence in the immediate future; Douglas & Skeem, 2005; Skeem et al., 2006).

Investigation of dynamic risk factors is a relatively recent phenomenon. Canadian researchers began examining dynamic risk factors in relation to sexual offenders and developed an actuarial instrument for assessing them (Hanson, 1998; Hanson & Harris, 2000). Examining violence more generally, the HCR-20 (Webster et al., 1997a) incorporated five dynamic variables into a guide for assessing risk that was based on a model using structured clinical

judgment. The Level of Service Inventory—Revised (Andrews & Bonta, 1995) is an instrument for assessing general risk that relies on an actuarial algorithm and assesses dynamic risk factors that may be the targets of interventions.

Although there is much agreement that more concentration on dynamic risk factors is essential in developing methods of risk reduction, the effort is only beginning. Douglas and Skeem (2005), following an extensive review of the literature, generated a list of the variables that show the greatest promise in this regard. More investigation into dynamic factors reviewed in context will undoubtedly follow.

In summary, mental health professionals continue to generate, and the criminal justice system continues to demand, information about the risk of violence in diverse populations of individuals. In the past 3 decades, great strides have been made in improving research methodology and establishing a large database relative to violence risk assessment. A number of solid risk factors have been established for various types of violence, and some helpful instruments have been validated. The database is now large enough and complex enough to require considerable expertise in its application. Less data is available to guide risk management. However, developing and applying specific methods of reducing risk is the next great challenge to the field.