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CHAPTER 11

Dangerousness and Mental Illness: Some Conceptual, Prediction, and Policy Dilemmas

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Concerns about the alleged or presumed dangerousness of an individual are raised in a variety of sociolegal contexts, e.g., involuntary commitment of the mentally ill, adjudication and commitment of defective delinquents and sexual psychopaths, the confinement and release of persons acquitted of criminal responsibility by reason of insanity, and the sentencing and release of "dangerous" offenders. The dangerous behaviors of greatest social concern in the above situations are those which are believed to pose a threat to members of the community, viz., dangerousness to others. However, commitment laws for the mentally ill typically use the phrase "dangerous to self or others." Thus, two conceptually different bases for State intervention (viz., to protect the individual's welfare under the *parens patriae* powers of the State and to protect the community against harm under the police power authority) tend to get thoroughly confounded.

Within the vast range of social behaviors and conditions that pose serious threats to the lives and welfare of citizens, only some elicit formal societal responses in efforts to curb and control the perceived dangers. These differential societal responses relate to the values and power held by influential groups in a society (Shah 1977).

This discussion is concerned with a number of issues pertaining to "dangerous" behavior toward others and, although a major focus is on the commitment and release of the mentally ill, the issues have broader implications and relevance. The major topics pertain to: (1) some definitional and conceptual issues; (2) some technical problems associated with the prediction of dangerous and violent behaviors; (3) the use of actuarial or statistical approaches for predicting "dangerousness"; (4) an illustration of the manner in which social control and treatment objectives become confused and confounded; and (5) some implications and suggestions for clinical practice relevant to the foregoing topics.

Some Definitional and Conceptual Issues

Definitional Issues

It has been suggested that "dangerousness," like beauty, lies in the eye of the beholder. Certainly, the term is rather vague and often appears to have surplus meanings. Another problem with the term is that it seems to imply a trait which is a relatively enduring and stable characteristic of persons so designated. Some of the problems associated with such a notion are addressed later in this discussion.

As used in this chapter, *dangerousness* refers to a propensity (i.e., an increased likelihood as compared to others) to engage in dangerous behaviors. *Dangerous behavior* refers to acts that are characterized by the application or overt threat of force and are likely to result in injury to other persons. The above statement would also define violent behavior. Thus, as used in this chapter, dangerous behavior is considered synonymous with violent behavior.

This usage is very close to the usual dictionary meaning of the word dangerous, but it certainly does not approach the specificity typically required of operational research definitions. However, my concern here is not with research definitions, but with the broader range of behaviors and events that the law for its purposes subsumes under the notion of "dangerousness." More precisely, acts that commonly are defined as *crimes of violence* exemplify the behaviors of major concern in the foregoing definition. The core behaviors or offenses of concern to the law are probably represented in the Uniform Crime Reports (UCR) of the FBI (Kelley 1976). The category of violent crimes includes: murder, aggravated assault, forcible rape, and robbery. Along with these offense categories are the so-called inchoate crimes, viz., attempts to commit violent crimes.

Of course, one could well go beyond these categories of violent crimes and include various other criminal acts such as assault and battery, arson, kidnaping, extortion, all serious felonies, or even lesser categories of criminal conduct (Goldstein and Katz 1960). In any event, the range of "dangerous" acts to be included under formal legal and other societal responses remains basically a matter of public policy and has to be addressed by appropriate policy-makers, viz., legislatures and courts.

Consideration of an individual's dangerousness is raised at many decision points in the criminal justice and mental health systems:

1. Decisions concerning the granting of bail (or release on personal recognizance) to persons accused of crimes; also the level at which bail is to be set.
2. Decisions concerning the waiver of juveniles charged with serious crimes to adult courts.
3. Sentencing decisions following criminal convictions, including decisions about release on conditions of probation.
4. Decisions pertaining to work-release and furlough programs for incarcerated offenders.
5. Parole and other conditional release decisions for offenders.
6. Decisions pertaining to the commitment and release of persons handled via a number of quasi-criminal statutes concerned with "sexual psychopaths," "sexually dangerous persons," "mentally disordered sex offenders," "defective delinquents," and the like.
7. Determinations of dangerousness for all indicted felony defendants found incompetent to stand trial (e.g., in New York State¹).
8. Decisions regarding the special handling (including transfer to special prisons) of offenders who are disruptive and dangerous in regular penal settings.
9. Commitment of drug addicts because of fears that they will commit violent crimes to support their drug habit.
10. Decisions concerning the emergency and longer term involuntary commitment of mentally ill persons considered to pose a "danger to self or others."
11. Decisions concerning the "conditional" and "unconditional" release of involuntarily confined mental patients.
12. Decisions concerning the hospitalization (on grounds of continuing mental disorder and dangerousness) of criminal defendants acquitted by reason of insanity.
13. Decisions regarding the transfer to security hospitals of mental patients found to be too difficult or dangerous to be handled in civil mental hospitals.
14. Decisions concerning the invocation of special legal proceedings or sentencing provisions for "habitual" and "dangerous" offenders.
15. Decisions concerning the likelihood of continued dangerousness of persons convicted of capital crimes, as a basis for determinations regarding the use of the death sentence.²

Despite the serious consequences for persons officially designated as "dangerous," it is astonishing to note the absence in far too many instances of clear and specific definitions and criteria for use of the key terms in the various relevant laws. (The topic of legal definitions of dangerousness with regard to the mentally ill is addressed at some

length in this monograph in the chapter by Prof. Alexander Brooks. See also Shah 1977.) Moreover, even though "dangerousness," as used in various laws and regulations, is clearly a *legal* term requiring determinations by courts and other designated triers of fact, often such crucial determinations are actually made by mental health experts. This situation has been criticized with regard to the apparent arrogation by psychiatrists and other mental health professionals of determinations that are fundamentally legal. However, it must be noted that the above problem is a reflection more of judicial default than of the arrogance of mental health professionals (Shah 1974).

Some Conceptual Issues

A major consideration in efforts to assess, predict, prevent, and change dangerous behavior pertains to the manner in which behavior is conceptualized. Behavior — whether defined as dangerous, friendly, constructive, or antisocial — is often viewed as stemming largely, if not entirely, from *within* the person, i.e., as being a stable and fairly consistent characteristic of the person. In other words, behavior is viewed in the traditional *trait* perspective, determined largely by the individual's personality. Thus, the assumption often is made that the samples of "dangerous" behavior are fairly typical of the individual and are likely to be displayed in other situations. Hence, through a conceptual shortcut, certain aspects of the individual's *behavior* are initially defined as dangerous, then the individual is described as possessing the *trait* of "dangerousness," and finally the *individual himself* comes to be viewed and labeled as dangerous.

The *trait* model of behavior has been a dominant force in personality research, theory, and clinical practice. According to the classic personality trait model, traits are considered to be the prime determinants of behavior and help to explain the apparent consistencies of behavior in different situations. The trait model assumes that the rank order of individuals with respect to a specific personality variable will tend to be the same across different settings and situations. Thus, even though the model recognizes the impact of situational factors, there is an assumption that persons described as "friendly" or "dependent" or "honest" or "aggressive" will tend to display such behaviors across a variety of situations. That is, such traits are believed to reflect fairly general and enduring personality and behavioral characteristics (Endler and Magnusson 1976).

Psychodynamic theories are much like the trait model inasmuch as they assume a basic personality core which is believed to serve as a predispositional base for behavior in various situations. It is in the

stress upon person-related factors that the psychodynamic model is analogous to the trait model (Endler and Magnusson 1976).

In contrast to the foregoing, a *situation-focused* model places major emphasis on the external stimuli and variables in the setting and situation as the basic determinants of individual behavior. Although recognizing individual differences, *situationism* is basically a stimulus-response (S-R) approach which focuses major attention on the stimulus factors influencing subsequent response (Endler and Magnusson 1976). However, the weakness of this model lies in the fact that it tends to ignore, or at least to underemphasize, individual-related factors as they influence the perception, interpretation, and response to the environment.

Much theoretical and empirical work has been done in recent years with respect to an *interactional* model of behavior. This model emphasizes the importance of ongoing person-situation interactions in efforts to understand both personality and behavior. It is held that behavior involves an indispensable and continuous interaction between individuals and the various situations that they encounter (Shah 1966). And, as Endler and Magnusson (1976) have recently noted:

Not only is the individual's behavior influenced by significant features of the situations he or she encounters but the person also selects the situations in which he or she performs, and subsequently affects the character of these situations. (p. 958)

Even though it has been reflected only to a limited degree in clinical practice until fairly recently, and even more infrequently in the forensic and legal areas, the aforementioned interactionist perspective has a rather long tradition in psychology (Kantor 1924, 1926; Lewin 1935; Angyal 1941). Several other theoretical perspectives are also relevant in this regard: e.g., social learning theory (Bandura 1973; Bandura and Walters 1963; Mischel 1968; Patterson 1971; Rotter 1954); developments in ecological psychology (Barker 1968); and more recent innovations referred to as environmental psychology (Proshansky, Ittelson and Rivlin 1970).

During the past decade, there has been a major resurgence in the fields of personality and social psychology with regard to the interactionist perspective. Following some earlier debates among those emphasizing person-related and others emphasizing situation-related factors, the accumulating empirical evidence has demonstrated rather clearly that individual-situation interactions need to be considered and are much more useful in helping to understand and to predict behavior, than either of these sets of variables alone (Endler and Magnusson 1976). Accordingly, the field has moved ahead, and there is now a general recognition that questions about the relative

importance of one or the other set of factors are futile — both are unquestionably important, especially in the particular ways in which they interact. (Bem and Allen 1974; Bowers 1973; Ekehammer 1974; Mischel 1973; Moos 1969, 1973.)

It must be emphasized, however, that the available evidence does *not* imply that different persons will not indeed act differently and also with some degree of consistency across situations. Rather, the evidence strongly indicates that the particular classes of settings and situations must be taken into account far more carefully than they have been in the past (Mischel 1973).

Just as individuals vary with respect to the range and types of behaviors they are likely to show in particular situations and also across situations, similarly the many complex social settings of life also vary in the degree to which they prescribe and limit the range of expected and acceptable behaviors for persons in particular roles and situations. Thus, some social settings are highly structured in that the rules and prescriptions for enacting specific role behaviors impose rather narrow limits on the range of possible behaviors (e.g., in church, at school, in a job interview, during a wedding ceremony, etc.). In other situations (e.g., informal social gatherings, a party, and other relatively unstructured social situations) the range of possible behaviors and roles is broad, and individuals have much more leeway in selecting and cognitively constructing and reorganizing situations with minimal external constraints. Mischel (1973) has described a number of cognitive social-learning person-related variables that help in understanding how the individual will tend to perceive, construct, and respond to various environmental situations. Similarly, Bowers (1973) points out that “. . . situations are as much a function of the person as the person's behavior is a function of the situation.” (p. 327). In the same vein, Pervin (1977) notes that *personality* is coming to be seen as expressing both stability and change, and that it is the *pattern* of stability and change in relation to specific situations that needs to be understood better.

This point is vividly demonstrated in a rather unique study of violence-prone men that was done by J. Douglas Grant and Hans Toch (Toch 1969). This study involved 128 men (police officers, men who had assaulted police officers, prison inmates, and parolees) who had shown patterns of repeated violent encounters. Attention was focused on the chain of interactions between aggressor and victim and on the sequential developments as the encounters resulting in violence unfolded. Based on this research, Toch, a social psychologist, points out:

. . . consistencies in a person's approach to others can produce situations in which violence always results — sometimes

without the person being aware of the fact that he is the instigator of destructive (or self-destructive) games. (p. 6)

Based upon detailed interviews with aggressors and their victims, as well as intensive study of relevant reports of the violent incidents, Toch developed a 10-category typology of violence-prone persons. These categories were given rather descriptive titles such as: "Rep Defending," "Norm Enforcing," "Self-Image Defending," "Self-Image Promoting," etc. The following are some brief basic descriptions of persons with certain consistent patterns of violent interactions.

The *rep defending* . . . person commits violence because his social position, physical size, or group status obligates him to do so — a matter of "noblesse oblige," so to speak. This sort of person is expected to have violent involvements, and he has therefore come to expect the same himself; he is aware of his role and of the need to defend it or to sustain it or to live by it. (p. 149)

A *self-image promoter* is a man who works hard at manufacturing the impression that he is not to be trifled with — that he is formidable and fearless. He goes out of his way to make sure that people understand how important he is and how important it is to him that he is important. (p. 137)

Toch surmises that perhaps a majority of violence-prone persons whom he studied could be described as deficient in verbal and other social skills. Thus, he points out "In some instances, violence is clearly related to clumsiness, as in cases of armed robbery where the bluff is unconvincing, or in situations where forcible rape substitutes for courtship and seduction" (p. 153). Such individuals, categorized as "pressure-removers," are described as:

. . . the type of person whose repertoire of available interpersonal strategies is limited, or at least insufficient to cope with some situations. Where others may be able to solve a problem through nonviolent techniques, such as verbal persuasion, the pressure remover feels himself smothered, walled-in, or subject to overwhelming odds. He may try to cope with this dilemma with brief desperate, half-hearted, floundering moves, but it is usually clear that he had arrived at the bottom of his resources before he started. (p. 154)

Toch's study of violence-prone men provides a rather vivid illustration of the point that some individuals have consistent interpersonal orientations which enable them to perceive, construct, and to respond to a variety of interpersonal situations in a manner which produces high probabilities of violent interactions. These persons respond aggressively to certain interpersonal stimuli which arouse

no such responses from other individuals. In a very real sense, therefore, such "violence-prone" individuals manage to *create* their own situations with minimal external cues or provocation.

The foregoing conceptual issues with regard to personality and behavior have been discussed at some length because the implicit or explicit conceptualization that one uses has implications for the manner in which the tasks of assessment, prediction, and handling of dangerousness will be approached. Thus, traditional practice (following the aforementioned trait and psychodynamic perspectives) is to focus attention primarily on the individual's major personality and behavioral traits and inferred psychodynamics. Relatively little attention is focused on the particular setting and situational factors, and on the patterns of individual-specific interactions which may differentially affect the occurrence of certain behaviors. Use of an interactionist perspective, however, requires that greater attention be focused upon the particular setting and situational conditions which have in the past and which are likely in the future to elicit, provoke, and maintain certain violent or other problematic behaviors. More attention also needs to be focused on the particular social settings and contexts in the community in which the person will live; assessments of likely functioning and problems must consider the availability and nature of the supportive, stressful, and other relevant factors likely to affect the person's functioning in the community. It has been shown, for example, that accurate predictions of posthospital adjustment of mental patients in the community hinged on knowledge of the particular environment in which the expatients would be living, the availability of jobs, family and related support systems—rather than on any measured characteristic of the individual's personality or his inhospital behavior (Fairweather 1967).

Some Technical Problems Associated with the Prediction of Dangerous Behavior

Traditionally there appear to have been two major assumptions underlying most laws authorizing indeterminate (and even preventive) confinement of the mentally ill, and also of persons variously designated as "sexual psychopaths," "sexually dangerous persons," and the like (Brakel and Rock 1971). The first assumption is that dangerousness (to self and others) is a characteristic typically, or at least frequently, associated with mental illness. Secondly, it is possible to make reliable and reasonably accurate assessments of persons likely to engage in dangerous behavior. While

there has been a paucity of sound empirical evidence to support these assumptions, in recent years increasing evidence has accumulated to challenge such beliefs. These assumptions do not have the degree of empirically supported validity that would provide necessary and reasonable support for related public policies and practices.

Several earlier studies found that persons who had been hospitalized in public mental hospitals had postdischarge arrest rates considerably lower than those for the general population (Ashley 1922; Brill and Malzberg 1962; and Cohen and Freeman 1945; Pollock 1938). However, more recent studies indicate that the arrest rates of exhospitalized mental patients tend to equal and even to exceed such rates for the general population (Durbin et al., 1977; Giovannoni and Gurel 1967; Rapoport and Lassen 1965, 1966; Zitrin et al. 1976). And, while various methodological problems can be noted in the various studies (see, e.g., the chapter in this monograph by Jacoby), it is quite evident that major demographic and other social developments have brought about vast changes in the characteristics of persons being confined to and discharged from mental hospitals. Moreover, as the criteria for commitment of the mentally ill are further tightened and rely increasingly upon the more demanding criterion of "dangerousness to self or others," the above more recent findings will undoubtedly receive further support.

However, there still remain many problems with the underlying assumption that the mentally ill constitute one of the most dangerous groups in our society. For example, analysis of the aforementioned studies indicates that higher arrest rates for exhospitalized mental patients are associated with some of the same factors that are related to criminal recidivism, viz., prior criminal record, personality disorders, and problems with alcohol and drug abuse. Thus, if indeed the major societal concern is with identifying groups that are clearly and demonstrably the most dangerous, then there is considerable evidence indicating that persons with repeated arrests and convictions for drunken driving (Alcohol and Highway Safety 1968; Mulvihill and Tumin 1969; Shah 1974) and offenders with three or more convictions for serious misdemeanors and felonies are quite demonstrably, not just presumably, very dangerous in terms of the probabilities of further involvement in serious crime (PROMIS Research Project 1977a, 1977b; Shinnar and Shinnar 1975; Wolfgang et al. 1972).³

With regard to the second assumption, the ability to make reliable and reasonably accurate predictions of dangerousness, there is impressive and convincing evidence pointing to the considerable technical difficulties inherent in predicting very infrequent events. Typically in such prediction situations there occur huge rates of

"false positive" errors, i.e., persons predicted as likely to be dangerous but who will *not* in fact display such behavior.

Some of the literature relevant to the phenomenon of low base rates and the effects on the prediction of such events appeared more than 20 years ago (Meehl 1954; Meehl and Rosen 1955; Rosen 1965). The *base rate* refers to the proportion of individuals in some population who fall into a category that is to be predicted, e.g., persons likely to engage in violent behavior. Other relevant literature bearing on the difficulties of predicting events with low base rate has appeared in recent years (Wenk, Robinson, and Smith 1972; Wenk and Emrich 1972). Yet, strange as it may seem, many of the "experts" who appear frequently in court to testify on the "dangerousness" of various types of social deviants (viz., delinquents, criminals, defective delinquents, sexual psychopaths, and mentally ill persons facing involuntary hospitalization) seem unaware of this literature and related research findings. It would appear, as Meehl suggested about 15 years ago in a related connection, that many mental health professionals who claim "expertise" in predicting infrequent events seem to "maintain (their) professional security . . . by not reading the research literature" (Meehl 1960).

It is important, therefore, to consider some of the systematic errors that occur in the course of clinical assessments and predictions. The expression "systematic errors" will be used here, following Chapman and Chapman (1967), to refer to reliable (i.e., fairly consistent) sources of inaccuracy in certain assessment and prediction tasks. Two such sources of error will be discussed: (1) illusory correlations, and (2) ignoring statistical rules in making predictive judgments.

Illusory Correlations

In some very elegant and important research, Chapman and Chapman (1967, 1969) have demonstrated the occurrence of what they refer to as illusory correlations, viz.,

the report by an observer of a correlation between two classes of events which in reality (a) are not correlated, or (b) are correlated to a lesser extent than reported, or (c) are correlated in the opposite direction than that which is reported (Chapman and Chapman 1967, p. 194).

Popular and even stereotyped associative connections were shown by these investigators to be one such source of systematic error in observations of correlations between symptom statements and features of projective test protocols (viz., projective drawings and the

Rorschach). Not only were both novice and experienced clinicians subject to these errors, but even lay persons (*viz.*, those without any psychological training) displayed similar types of error. On projective drawings (Draw-a-Person Test) and the Rorschach, the clinical significance of certain test "signs" was found to correspond to the rated associative strength between certain symptoms and test features, rather than to the *actual* occurrence of such relationships. For example, emphasis on the eyes in the figure drawings was consistently associated with suspiciousness and paranoia, and Rorschach responses pertaining to the buttocks were consistently associated with male homosexuality. Chapman and Chapman found that these illusory correlations demonstrated remarkable persistence and survival strength even in the face of negative evidence provided in the experiments. Indeed, the systematic errors based upon associative connections seemed somewhat impervious to the contrary influence of valid relationships.

The above findings cannot be dismissed as exceptional. Golding and Rorer (1971), in a modification of the Chapman and Chapman Rorschach study, replicated the illusory correlation phenomenon. Similar results have been demonstrated by Starr and Katkin (1969) using the Incomplete Sentences Blank, and by Sweetland (1972) with regard to assessments concerning the degree of "dangerousness" and "nondangerousness" reflected in various personality characteristics. Sweetland's findings suggest that widely held social stereotypes appear to be present among psychiatrists and members of the general public with respect to personality characteristics that supposedly are and are not associated with the likelihood of "dangerous" behavior.

Ignoring Statistical Rules in Predictive Judgments

Kahneman and Tversky (1973) have demonstrated that intuitive predictions (which would include many of the clinical assessments made by mental health professionals) rely on the judgmental heuristic of *representativeness*. That is, the tendency is to predict the outcome that appears to be most representative of the available evidence. In many situations representative outcomes are certainly more likely than others. However, since this is not always the case, particularly when relatively rare and episodic events are involved, systematic errors are likely to be made. In addition, factors such as prior probabilities of outcome (*i.e.*, the base expectancies) and the reliability of the available evidence must be considered with respect to the likelihood of the expected outcome.

For example, a fundamental rule of statistical prediction is that *expected accuracy* must control the relative weights assigned to the specific evidence being used for predictions (e.g., various clinical indices and "signs") and to the prior information, viz., the base rates. As the expected accuracy of the predictions decreases (e.g., in situations where the base rates are very low and the available evidence is not very reliable), the predictions should become regressive and shift closer to the base rates. For example, if only 10 percent of a particular group are expected to engage in future violent behavior on the basis of prior probabilities, and if the specific evidence concerning the predictions is of poor reliability (e.g., clinical assessments and certain psychological test indices), then the predictions should remain very close to the 10 percent base rate. The greater the move away from the base rates under the above conditions the greater will be the probability of error (Kahneman and Tversky 1973; Tversky and Kahneman 1974.)

Experiments conducted by Kahneman and Tversky (1973) have demonstrated that individuals engaged in predictive tasks commonly disregard information concerning prior probability when some specific current information is provided. There is a tendency instead to resort to the "representativeness heuristic," even to an extent that involves gross departures from the prior probabilities. Thus, Kahneman and Tversky (1973) have observed:

Evidently, people respond differently when given no specific evidence and when given worthless evidence. When no specific evidence is given, the prior probabilities are properly utilized; when worthless specific evidence is given, prior probabilities are ignored. (p. 242)

Even though these authors were not referring specifically to clinical predictions of dangerous behavior, similar problems certainly seem to be involved in these situations. Yet, it is doubtful whether most clinicians who function in correctional, forensic, and related mental health settings are aware of these systematic errors. In fact, one might even wonder about the extent to which professional training and related clinical experiences tend to socialize (or even to indoctrinate) clinicians into practices in which exaggerated and possibly erroneous credence is given to specific information about persons in the form of various "clinical" and "pathognomonic" signs, even though the base rates involved may be low and the reliability of certain "signs" quite poor.

The implications of these types of error are considerable for clinical assessment and prediction efforts, especially with regard to the low base rate event of "dangerous" behaviors. Moreover, since the above discussion has indicated that the errors involved tend

to be *systematic*, such problems cannot simply be attributed to careless clinical practices. Such systematic errors need to be remedied by making clinicians very aware of and sensitive to such problems; this would require various continuing education and inservice training efforts. And, the formal training of mental health professionals should place greater emphasis on informing students about such systematic errors and inculcating in them greater familiarity with, and increased use of, fundamental statistical rules when predicting events with low base rates.

Actuarial or Statistical Approaches to Prediction

Given the liberty- and life-affecting decisions often influenced by clinical judgments concerning future "dangerousness," there should be consensus that such judgments need to be made as reliable and accurate as possible. However, it has already been noted that prediction of behaviors with very low base rates is typically accompanied by high rates of "false positive" errors. In addition, it has been pointed out that certain systematic errors also appear to be involved. From this it follows that attention should be directed toward various approaches that could help to decrease the problems and errors associated with the usual clinical predictions.

During the past 20 or more years, a sizeable literature has developed regarding actuarial or statistical approaches to prediction (Degroot 1961; Goldberg 1965, 1968, 1970; Gough 1962; Holt 1958; Lindzey 1965; Meehl 1954, 1965; Meehl and Rosen 1955; Grebstein 1963; Sawyer 1966; Pankoff and Roberts 1968). In actuarial approaches to prediction, the individual is placed in a class, or several sets of classes, on the basis of data concerning his life history, particular characteristics, scores on behavior rating scales or psychological tests, etc. The combination of these sets of information allows a classification which, when assessed in reference to appropriate actuarial tables, provides an expected probability that the individual in question belongs to a group that will or will not display the predicted behaviors.

The term "prior probability" is used to refer to a prediction that can be made in the absence of any information about a specific individual. For example, it may be known that only 10 percent of all persons diagnosed as suffering from psychotic disorders are likely to engage in assaultive or violent behavior. This means that, before anything else is known about a mentally disordered person who has been so diagnosed, there is a "prior probability" that this

person has one chance in ten of engaging in some future violent behavior.

The term "conditional probabilities" is given to factors that are empirically demonstrated to *modify* the prior probability. For example, relevant empirical research may demonstrate that psychotic mental patients who have displayed assaultive and violent behavior in the past tend to have certain distinctive characteristics. For purposes simply of illustration, let us assume that it is found that psychotic patients who have particular psychiatric diagnoses, who have a history of criminal arrests, who are males below age 35, and who also have a record of alcohol or drug abuse, comprise 40 percent of a violent patient group and only 8 percent of a non-violent group. We could then say that a mentally ill person diagnosed as suffering from a psychotic disorder and with the aforementioned specific characteristics belongs to a class that is five times more likely to be violent than patients in the other group.

The "conditional probabilities" can therefore be used to modify the "prior probabilities" in order to arrive at a predictive index called the "posterior probability." Thus, even though base rates may suggest that only 10 percent of psychotic persons are likely to be assaultive (the "prior probability"), when other factors (the "conditional probabilities") are taken into account, the base expectancy for psychotic patients with certain characteristics may be significantly higher than for other psychotic patients. (For further details regarding actuarial approaches to prediction, and the results of one application of this approach, see Didenko et al., 1972.)

In essence, then, estimates of future behavior cannot be made with certainty. Rather, statements are made regarding the probability associated with certain predictions. Stated differently, predictive judgments may be viewed as probability statements about future events, even though a particular judgment may not be phrased explicitly in terms of estimated probabilities. For example, when a sentencing judge decides that a prison term is indicated for an offender in order to protect the community (rather than a period of supervised probation), he may be saying in essence that there is a high probability of criminal recidivism. Similarly, decisions about the involuntary hospitalization of a mentally ill person on grounds of "dangerousness to others" reflect the expectation that, if not hospitalized, the individual has a high probability of engaging in some "dangerous" behavior.

When judgments are based simply on an expectation that some future behavior will or will not occur, such decisions are either *right* or *wrong*. The judgments thus have a dichotomous YES/NO character, are apt to be very subjective, and may vary considerably from decisionmaker to decisionmaker. In contrast, probability

statements (on a scale of say zero to one hundred) can be evaluated, not as being either right or wrong, but as being *reasonable* or *unreasonable*. The decisionmaker retains responsibility for the final judgment regarding the degree of probability considered to be appropriate or reasonable for making particular decisions. Objective rules may also be developed to aid decisionmaking in light of known probabilities and the expected consequences of the types of error that can result. For example, various legal decision rules such as "preponderance of the evidence," "clear and convincing evidence," "clear, cogent, and convincing evidence," and "beyond a reasonable doubt," are essentially statements concerning the degree of certainty (probability) that should guide particular determinations (Didenko et al. 1972; Gottfredson et al. 1974).

This discussion is designed to suggest that greater attention should be given to ways in which actuarial methods could help to improve the very difficult predictive tasks being addressed in this chapter. Empirically derived base expectancy tables could provide decisionmakers with objective and reliable information about prior probabilities, known conditional probabilities, and the estimated risks associated with certain choices. Needless to say, such tables must regularly be checked and updated in light of actual experience in order to improve predictive accuracy.

However, consistent with the interactionist perspective discussed earlier, it is most essential that the base expectancies not be derived only from the past characteristics of the individual. Such predictive approaches should also include variables pertaining to the particular settings and situations in which the behaviors of concern are expected to have increased or decreased probability of occurrence. Further, even though certain historical features will remain unchanged for an individual (*viz.*, trouble with the police since an early age, prior incarcerations, record of alcohol abuse, etc.), care must be taken to *also* include more recent factors which are found empirically to modify the previous predictors (e.g., cessation of alcohol abuse, a stable marriage and occupational adjustment, older age, etc.).

Of course, actuarial approaches will not provide*any easy solution to the difficult judgments confronting decisionmakers. For example, knowledge that Mr. Smith belongs to a group that has a 70 percent probability of serious criminal recidivism (as compared with a general base rate of 10 percent), still does *not* indicate whether Mr. Smith will be among the 70 percent who are likely to show serious recidivism or the 30 percent not likely to do so. In the final analysis, the decisionmaker will still have to exercise his or her judgment in light of other social values and objectives and keeping in mind considerations of public policy.

It has been emphasized that a major technical problem inherent in the prediction of events that have very low base rates is the high rate of "false positive" errors. One approach for reducing such errors would be to try to increase the base rates of the groups for expected future violence by screening out persons with very low likelihood of engaging in such behaviors (e.g., persons over age 40 years, those without prior criminal records, and persons without a history of problems with alcohol or other drugs). The higher base rates for the remaining group should make the predictive task somewhat easier in that the rate of "false positives" would be reduced. One might also wish to focus especially on subgroups with *markedly* increased probabilities for engaging in serious and violent crimes. For example, Walker, Hammond, and Steer (1967) found that with each successive conviction for a violent offense, the probability that the offender would engage in further violent crimes was markedly increased. Forty percent of the 45 men with two previous convictions for violence were reconvicted for a violent offense, and 55 percent of 11 men with four or more previous convictions for violence were reconvicted for a violent offense. Similarly, the PROMIS Research Project (1977a, 1977b) in the District of Columbia found that if a defendant had five or more arrests prior to the current arrest, the probability of subsequent arrests began to approach certainty. (See also Shinnar and Shinnar 1975; Wolfgang et al. 1972.)

In sum, given the many sources of differences among decision-makers, the increased use of actuarial approaches for making various predictive decisions would certainly improve the consistency and uniformity of such decisions based upon explicitly stated criteria. And, even though there would continue to be difficulties with predictive accuracy, at the very least one could achieve greater "equity" and "fairness" by ensuring that individuals are treated more equally as compared with others who are sufficiently similar in terms of the characteristics and criteria used for the decisions (Wilkins 1975, 1976).

The Confounding of Social Control and Treatment Objectives

It has been pointed out that there are several instances in the handling of the mentally ill and certain other categories of social deviants where our legal system tends to confound social control objectives designed to protect the community (viz., police power concerns) with the asserted *parens patriae* aims of providing proper

treatment for the deviant individuals (Shah 1975, 1977). Rather typically, the individual whose fate is being determined pays a heavy price as a result of the confounding of the stated purposes. More specifically, assertions of benign and therapeutic concerns seem to provide the rationale for exercising a degree of social control (viz., indeterminate and preventive confinement) that could not be used via the usual criminal sanctions.

This section will discuss an example of such confusing and confounding of different social purposes and associated legal rationale. The handling of persons who have been acquitted of a criminal charge by reason of insanity will serve to illustrate these problems. The specific practices to be discussed prevail in many jurisdictions, including the District of Columbia.

To begin with, the doctrine of exculpatory insanity derives from certain moral, social, and legal considerations which hold that in our system of justice it is neither fair nor proper to punish individuals who cannot be held blameworthy for the commission of criminal acts. Hence, despite the commission of a voluntary act which contravenes criminal laws (*actus reus*), this alone does not constitute a crime. There has, in addition, to be the requisite criminal intent (*mens rea*) in order for the act to constitute a *crime* and, barring other relevant legal defenses (e.g., self-defense), for a conviction to result. In other words, there has to be the "concurrency of an evil-meaning mind with an evil-doing hand" (Goldstein 1967). Thus, the rationale for use of the insanity defense is provided by relevant legal doctrine and the finding of "not guilty by reason of insanity" (NGRI) constitutes a *legal* determination with respect to prescribed sociolegal processes involved in criminal and adjudication.

It should also be noted that courts have repeatedly pointed out (e.g., *McDonald v. United States*⁴), that the concepts of mental disease or defect, as used by legislatures and courts for certain public policy and legal determinations, are *not* synonymous with the psychiatric meanings and uses of these terms.

The defense of insanity raises questions about the defendant's mental condition at the time of the alleged offense. And, there has been much recent judicial opinion that a determination of exculpatory insanity does not automatically nor even necessarily imply *present* "insanity" (i.e., following the NGRI adjudication). Thus, applying principles derived from the Supreme Court's decision in *Baxstrom*,⁵ the U.S. Court of Appeals in *Bolton v. Harris*⁶ held that a finding of "not guilty by reason of insanity" (NGRI) could *not* lead to an automatic commitment of the individual (acquittee) to a mental hospital. Rather, the Court held that

After acquittal by reason of insanity there is also need for a new finding of fact: the trial determined only that there was a reasonable doubt as to the defendant's sanity in the past, present commitment is predicated on a finding of present insanity. (p. 650)

Thus, the *Bolton* ruling required that persons acquitted as NGRI must be given a "judicial hearing with procedures substantially similar to those in civil commitment proceedings" (p. 651). (See also: *United States v. McNeil*;⁷ *United States v. Ecker*;⁸ *State v. Carter*;⁹ *State v. Krol*.¹⁰)

For purposes of illustrating the various confounding problems with regard to the handling of NGRI acquitees, let us assume: that we have an individual with a long criminal record who was found to be suffering from paranoid schizophrenia at the time of the present offense; that the offense (assault with a dangerous weapon) was adjudged to be related to the defendant's schizophrenic disorder; that the postacquittal judicial hearing (viz., the *Bolton* hearing) found the person still to be suffering from the schizophrenic disorder and thereby likely to pose a danger to others. The latter finding would meet the usual civil commitment criteria in the District of Columbia and, as a result, the acquittee would be committed to Saint Elizabeths Hospital for an indeterminate period.¹¹

Release from indeterminate confinement must be based on the conditions and criteria provided in the D.C. Code. The statute requires that the hospital superintendent must certify

(1) that the person has recovered his sanity, (2) that in the opinion of the superintendent, such person will not in the reasonable future be dangerous to himself or others, and (3) in the opinion of the superintendent, the person is entitled to his unconditional release from the hospital. . . . (p. 1641).¹²

Under provisions of Sec. 24-301 (e), the superintendent can also provide a certification recommending the patient's "unconditional release" when the individual's functioning is not such as to warrant unconditional release.

Following the superintendent's certification, the court may on its own discretion or upon objection of the Government hold a hearing to consider the evidence relevant to the recommended release. And, in order to authorize unconditional release, the court must find that the aforementioned criteria in the superintendent's certification have satisfactorily met the statutory requirements.

Since an extended discussion of the topic and many related concerns is not possible here, and since a number of complex and technical legal issues are also involved, the aforementioned confusing

and confounding features will be addressed in reference to the following specific questions.

Is the NGRI acquittee committed to the mental hospital for treatment of his "insanity," and/or for his offensive conduct?

Keeping in mind the specific case being used here for purposes of illustration, the above question translates itself into a query about whether the NGRI acquittee is to be treated for the paranoid schizophrenia—which condition provided the basis for the insanity acquittal, or whether he is also to be treated for his offensive behavior (viz., assault with a dangerous weapon) and for any criminal propensities.

We might recall that the legal determination resulting in the insanity acquittal was based upon a finding of a mental disorder adjudged to constitute "insanity," and a further finding that there was the legally required connection between the "insanity" (paranoid schizophrenia) and the offensive behavior. However, although this determination conforms to relevant legal doctrine and requirements, it does *not* necessarily mean that once the person's schizophrenic disorder has effectively been treated there will be no further criminal behavior. Clearly, the vast majority of persons who engage in various types of aggravated assaults and other serious criminal acts do not suffer from paranoid schizophrenia, nor any other psychotic disorder (Guze et al. 1962; Guze et al. 1969). Likewise, the great majority of persons suffering from paranoid schizophrenia do not engage in criminal behavior. Moreover, if there are public policy and legal concerns that the NGRI acquittee be successfully treated for his offensive and dangerous behavior (the assault with a dangerous weapon), then it should be evident that mental hospitals are not the facilities which either claim, or which could even reasonably claim, to provide effective treatment for criminal behavior. There is no sound empirical research indicating that mental hospitals have had any demonstrated success in "treating" criminal behavior. In those particular instances where a criminal act resulted very directly from a psychotic delusion, one might assume that, absent the delusion, a similar criminal act would not be likely to occur. There might well be other instances where the connection between the mental disorder and the criminal act was so direct and specific that effective treatment of the former could reasonably be expected to prevent the occurrence of the latter. It must be remembered, however, that the adjudication resulting in the insanity acquittal was related to certain moral values and legal doctrine—and *not* to considerations of psychiatric treatment (nor even the treatability) of the mental disorder and the hoped for effects on subsequent criminal behavior. Yet, *legal* decisions involving criminal adjudication and insanity acquittals tend rather typically

to be confused and confounded with mental health and psychiatric considerations relevant to effective treatment.

In regard to the adequacy and effectiveness of treatment, Schwitzgebel (1975) has pointed out that the "adequacy" of treatment should be determined in terms of its *effectiveness* in producing the intended results, e.g., in achieving the improvements that could bring about the person's return to the community. Therefore, when an involuntarily confined patient receives even "adequate" treatment which offers little hope of improvement (e.g., with respect to further "dangerousness"), serious due process and equal protection questions would seem to be raised. For lacking effective treatment for the "insanity" and the "dangerousness" of the NGRI acquitee, there would seem to be little rational, or even reasonable, basis for a differentiation in the processing of the criminally insane and other criminals.

Schwitzgebel (1975) has stated the problem very well when he points out:

Mentally ill patients who are considered dangerous are presumably confined for treatment of their dangerousness. If they are untreatable, their confinement constitutes preventive detention. The labeling of this type of confinement as "treatment" for its legal and political cosmetic effect should not be permitted to obscure the basic fact that untreatable and untreated patients are being involuntarily confined for potentially long periods of time. The state should not be permitted to accomplish by false labeling that which it could not accomplish by an honest use of legal procedures. (p. 125)

It would appear, then, that the mental hospital is placed in the rather untenable situation of being expected to treat not only the mental disorders that it can properly and in most instances effectively handle (viz., schizophrenia and other major mental disorders), but it is also expected to do that which it cannot, viz., to effectively treat criminal and dangerous behavior.

According to the provision of the D.C. Code an NGRI acquitee seeking release must first be certified by the hospital superintendent as having "recovered his sanity."¹³ Is the term "sanity" used in specific reference to the mental disorder found to be present at the time of the offense, or does it refer to *any* mental disorder?

The statute uses the appropriate legal term "sanity," and this presumably would refer to the specific mental disorder which was found to provide the *legal* basis for the finding of exculpatory insanity. In the case being used here for purposes of illustration, reference was made to a paranoid schizophrenic psychotic disorder.

Thus, at such time as this schizophrenic patient shows substantial recovery the superintendent could at least certify that the person has "recovered his sanity."

However, several confusing elements are present. It is not entirely clear, for example, whether the term "sanity" as used in the statute and as interpreted by courts refers to marked improvement in the specific mental disorder that provided the basis for the NGRI acquittal, or whether the term "sanity" is also used to require recovery from any and all other mental disorders that might be present.

Let us suppose that the NGRI acquitee in our illustration (who has a long criminal record predating the current incident) has recovered from the paranoid schizophrenia but is now back to his usual and longstanding level of functioning, which involves a personality disorder (viz., antisocial personality). What implications does this have for the superintendent's certification and also for the court's decision with regard to the criteria for conditional and unconditional release?

Relevant case law in the District of Columbia speaks in this connection of "persons who are dangerous *due to mental illness* . . ." ¹⁴ (emphasis added). Consistent with the foregoing analysis, in the case of persons acquitted by reason of insanity, the "mental illness" referred to should be the "insanity" found to be present at the time of the offense. However, the reference to "mental illness" should not include the many other conditions which might be so labeled by mental health professionals, especially since courts and juries are not to be "bound by ad hoc definitions or conclusions" as to what psychiatrists and other mental health professionals consider to be mental disease. ¹⁵ If the term mental illness is used in the latter and much broader sense (viz., not restricted to legal notions of "insanity," but including all personality disorders, sexual deviations, as well as problems associated with alcohol and drug abuse), such a wide net would easily include a very large percentage of convicted and penally incarcerated offenders (Guze et al., 1974; Piotrowski et al., 1976).

Since the individual in our illustration has a long criminal record, this fact, *standing alone*, might well predict further "dangerous" behavior in terms of criminal recidivism. However, this likelihood of recidivism would typically have little to do with the "insanity" (the paranoid schizophrenia), but would be expected in terms of the long criminal record and the personality disorder. If the indeterminate confinement of the NGRI acquitee is to continue even after the schizophrenic disorder is in remission, then very obviously the person is being held to a standard of release that is *substantially*, even vastly, different from that which would have applied had he

been subjected to the usual punitive sanctions of a criminal conviction and prison sentence.

There is also another point to consider. If indeed public policy requires that the community be protected from persons who are likely to pose a continuing and serious danger, it is difficult to see why this very understandable social concern should be limited to persons believed to be "dangerous due to mental illness." It seems evident that the critical and even controlling societal concern pertains to the dangerous behavior—and *not* to the mental illness. Hence, there would appear to be no "reasonable," and certainly no "compelling," State purpose in singling out the mentally ill and not looking for groups that are demonstrably the most dangerous in terms, say, of serious and continuing criminal conduct (Note 1974).

It appears that, like many other segments of the community, legislators and judges also share the belief stated explicitly some years ago in an appellate opinion:

It is, of course, much easier to believe that a sane person will not in the reasonable future be dangerous to himself or others than to believe that an insane person will be.¹⁶ (p. 464)

Regrettably, the above type of beliefs is as erroneous as it evidently is easy to acquire and to maintain. Such beliefs relate to the much-studied stereotypical and rejecting attitudes commonly held about the mentally ill (Bord 1971; Cummings and Cummings 1975; Dohrenwend and Chin-Shong 1967; Giovannoni and Gurel 1963; Nunnally 1961; Phillips 1963, 1964, 1967; Rabkin 1972).

It would appear, then, that the mentally ill tend to be discriminated against as a class (Note 1974; Shah 1977). If the real societal concern is to protect the community against persons most likely to engage in further and serious criminal recidivism, then a much stronger case could be made that recidivistic criminal offenders (*viz.*, those with three or more convictions for serious misdemeanors and felonies) would, as a group, constitute a significantly greater threat to the community than the mentally ill (*cf.* footnote 4; PROMIS Research Project 1977*a*, 1977*b*; Shinnar and Shinnar 1975; Wolfgang et al. 1972). Certainly, one should expect major public policies and legal determinations to be based upon well-documented and empirically demonstrated evidence, and not on stereotypical attitudes and erroneous beliefs.

In recent years, the principles of *Baxstrom*,¹⁷ *Humphrey*,¹⁸ and *Jackson*¹⁹ have been applied by many State and Federal courts to overturn procedures and standards for the involuntary confinement of NGRI acquitees (see, e.g., *Bolton v. Harris*, *State v. Krol*, and *Waite v. Jacobs*²⁰). In *Waite v. Jacobs* the Court noted that

Read together, then, *Humphrey* and *Jackson* indicate that, once the maximum sentence period has expired, it is unconstitutional to discriminate against an acquittee, as compared with a comitee [a civilly committed patient], for purposes of release from indefinite commitment. From that moment on, acquitees and comitees appear, in the Court's contemplation, to be on the same footing. (p. 399)

The aforementioned and similar court decisions have sought to provide remedies based upon comparisons of procedures used for handling mentally ill persons committed via the civil and the criminal commitment processes. However, it seems to me that similar comparisons should also be undertaken with respect to classes of persons subjected to various types of involuntary confinement based upon police power objectives, e.g., NGRI acquitees and convicted offenders. Even though persons found to be suffering from exculpatory insanity are diverted from the criminal process on the rationale that they should be protected from the punitive sanctions of the criminal justice system, there is reason to believe that in many instances the indeterminate confinement may well exceed the prison term likely to be served by the convicted offender.

The setting of durational limits on the indeterminate confinement of the NGRI acquittee does provide a long-needed step toward affording greater due process and equal protection safeguards to such persons. However, in relating the durational limits to the maximum criminal sentence provided for the offense, courts should remember that even after felony convictions, a significant number of offenders are placed on probation and very few prisoners actually serve the maximum sentence. For example, in 1974, about 46 percent of defendants convicted in U.S. District Courts (including the District of Columbia) were placed on probation (Hindelang et al. 1977, Table 5.41).

Thus, as Goldstein (1967) pointed out some years ago with respect to the use of the insanity defense:

The critical issue is not so much that of commitment but that of release. The manner in which it is handled determines whether the commitment is entirely therapeutic, whether it is an elaborate mask for preventive detention, or whether it is an awkward accommodation of the two objectives." (p. 146)

In sum, the confusing and confounding of police power and *parens patriae* objectives, and also of legal and mental health concerns, serve to place the mental hospital in a role much like that of a maximum security prison, but with the added feature of allowing indeterminate periods of confinement and using rather stringent standards for release. Thus, to paraphrase Justice Fortas, the NGRI

acquittee can end up receiving "the worst of both worlds" — he receives neither the full range of protections and the determinate confinement accorded to criminals, nor the adequate and effective treatment sought from the mental health system.²¹

Some Implications for Clinical Practice

Earlier in this chapter, traditional personality trait and psychodynamic perspectives on behavior were described as being insufficiently cognizant of the setting and situational aspects influencing behavior. It was also noted that a situationism perspective was inadequate in that it tended to ignore or to underplay individual characteristics that must indeed be considered for understanding behavior. It was suggested that an interactionist perspective provides a distinct improvement in the conceptualization of behavior; this approach also has several implications for improving the assessment, prediction, prevention, and treatment of certain types of behavior.

This section outlines some major questions and provides some suggestions relevant to the assessment, prediction, and handling of dangerous behaviors.

There needs to be some clear notion as to which specific acts (behaviors) fall within the legal definition of "dangerousness."

Determinations about the specific range of behaviors judged to constitute "dangers" to the community, within the meaning of the relevant laws, have to be provided by appropriate policymakers, i.e., legislatures and courts. These are fundamentally normative and public policy judgments, and they should *not* be left, whether directly or through default, to "experts." Thus, expert witnesses should not be asked by courts or other decisionmakers whether an individual is likely to be "dangerous," without some clarification and specification as to the range of behaviors of legal concern (e.g., acts of violence against persons, felonious crime, etc.). Open-ended questions invite experts to use their own personal and possibly idiosyncratic notions of what *they* consider to be "dangerous." Of course, mental health professionals need not be so willing to answer open-ended questions on this issue; however, they could and indeed should ask for further specification and do not have to cooperate in practices which may reflect varying degrees of judicial default (Shah 1974).

The courts should explain to experts what acts are considered to be "dangerous," based upon statutory provisions and relevant case law. In this regard, the efforts of the U.S. Circuit Court for the

District of Columbia (e.g., *Millard v. Harris*,²² and *Cross v. Harris*,²³) are quite notable. More recently, in *State v. Krol*, the Supreme Court of New Jersey provided further clarification about the meaning and scope of the phrase "dangerous to self and others." The Court noted:

Dangerous conduct is not identical with criminal conduct. Dangerous conduct involves not merely violations of social norms enforced by criminal sanctions, but significant physical or psychological injury to persons or substantial destruction of property. Persons are not to be indefinitely incarcerated because they present a risk of future conduct which is merely socially undesirable.²⁴ (p. 301)

This type of judicial clarification has long been overdue, and further efforts along these lines are greatly to be desired.

Once dangerous behaviors have been defined, the next series of questions pertain to the likelihood that such behaviors may recur. Some of these questions are empirical in nature and could well be asked of persons who are familiar with the relevant clinical and scientific evidence and who have been accepted by courts as competent and knowledgeable "experts." Other issues remain essentially matters of law and have to be resolved by duly designated triers of fact. The following questions and related suggestions pertain to the assessment, prediction, and handling of behaviors that are considered to pose a danger to others.

(1) What is the likelihood (probability) that the feared dangerous behaviors will occur or recur?

This is the crucial and most difficult question with respect to predictive assessments. Rather typically, the answer seems to depend pretty much on the subjective, intuitive, and often "seat-of-the-pants" impressions of various experts. Moreover, there is often a failure to provide some objective description of the assessment process, of the specific criteria used, and of the cues and "clinical signs" used for making predictions of dangerousness. Thus, even though some clinicians may well be good predictors, it is very difficult to know precisely how they go about making their assessments. Disagreement among mental health professionals is rather common. Furthermore, when there do appear to be high levels of agreement about an individual's expected "dangerousness," it is difficult to know how much of this agreement might relate largely to the perceived social contingencies influencing the assessment (viz., concerns about the anticipated public uproar if the released person should again commit a dangerous act).

To reduce inconsistencies and disagreements among mental health professionals in predicting "dangerousness," Schwitzgebel

(1977) has suggested that two or more experts be asked to make such assessments—but *independently*. In this way, factors that might be either overlooked or over-rated by one expert may be corrected by the other. It is essential, however, that the initial assessments be conducted independently, and *not* by having one person's assessment simply reviewed by the other. Also, the professionals should be asked to specify the particular factors and considerations which led to their conclusions. Such specification would allow more adequate review and scrutiny of the conclusions and predictions; also, such information would be more amenable to empirical research designed to improve predictive reliability and accuracy.

With respect to determining the likelihood of future violent behavior, as well as the frequency and likely social context of such behaviors, it is most essential to carefully ascertain the relevant history and pattern; e.g., whether there have been any such behaviors in the past; and, if so, whether the previous violent act(s) was part of a consistent or persistent pattern (cf. the earlier discussion regarding Toch's typology of "violence-prone" men), or whether it was a rare and possibly one-time event. If the violent behavior was quite untypical, the predictive task may well be impossible. The best that one could do would be to try to determine the particular person- and situation-specific factors which appear to have elicited the past violent act. Also, determinations should be made whether the same or very similar circumstances are likely to recur in the person's life situation. For example, in the case of a serious assault on a spouse, and where the violent act was part of a longstanding pattern of domestic arguments lubricated by considerable imbibing of alcoholic beverages, it will be important to determine whether the individual will be returning to the spouse, whether the previous pattern of heavy drinking by the couple is likely to continue, and whether the wife has obtained a legal separation or divorce or has otherwise moved away from the setting to which the man will return.

In some other cases the likelihood of repeated violent behavior may relate to some clearly discernible sequence of circumstances that can be ascertained from the relevant history. For example, in a case of child battering it was determined that the unmarried young woman was usually a very attentive and capable mother to her three small children all under 6 years of age. However, it was when her boy friends began to lose interest in her and she was left alone to care for the children in her state of worry and resentment, and also when she began to drink, that incidents of child battering had typically occurred. Such knowledge can be of much value to persons charged with assisting the woman under some form of

community supervision. For example, therapeutic and various other supportive help would most urgently be needed when the woman's life circumstances (such as those noted above) indicate a markedly increased probability of further child abuse and battering. As long as the necessary support and assistance could be provided in the community, confinement would neither be necessary nor even indicated.

A closely related question pertains to the period of time within which some probable dangerous acts might occur. That is, the decisionmakers would need to know the likely frequency of such acts and also the situational contexts that might facilitate or evoke such behaviors.

Again, the individual's past pattern of behavior and functioning, as well as knowledge of the social setting and circumstances in which he will be living, will typically provide more relevant and reliable information than the person's psychiatric diagnosis. In short, the situation with respect to determining the "dangerousness" of mentally disordered persons is not basically different from that faced in evaluating criminal recidivism for offenders.

For example, if the individual has a long criminal record, a pattern of poor occupational functioning, very limited job skills, various behavioral and social problems such as alcohol and drug abuse, and if there is also likely to be an absence of family or other social supports to assist the individual upon his return to the community, then the probability of further criminal conduct would generally be rather high. And, the above factors will tend to be far more critical and determinative of outcome than the person's psychiatric diagnosis—other than accompanying personality disorders. Indeed, it appears that the conditional probabilities associated with serious criminal recidivism will have factors in common for convicted offenders and for many mentally disordered offenders. Predictions of future dangerous behavior can reasonably be made when there exists a long pattern of serious criminal behavior and associated factors (e.g., youthful age, alcohol problems, and absence of stabilizing and supportive resources) remain in effect. It remains to be determined whether variables such as psychiatric diagnoses (other than personality disorders) and a history of serious mental illness help by themselves to distinguish particular subgroups with respect to their future dangerousness. Based upon current knowledge, it might even be that, by focusing *primarily* on the person's mental condition and on vague and often very speculative psychodynamic factors, mental health professions may well tend to *decrease* their predictive accuracy (cf. the earlier discussion regarding some statistical rules in making predictive judgments).

(2) Who are likely to be the victims of the expected or feared "dangerous" behaviors?

Decisionmakers may wish to know whether the dangerous acts are more likely to occur against some *particular persons* (e.g., a spouse or girl friend, the individual's own children, or a neighbor with whom longstanding conflicts have occurred), and/or against some *broader group* of people (e.g., minor boys or girls in the case of a pedophile, adult women in the case of certain exhibitionists or rapists, etc.), and/or against a *more dispersed segment of the community* (e.g., the likely victims of "purse-snatchings" and other street robberies, potential victims of recidivistic drunken drivers, etc.). Here, again, the previous and longstanding pattern of behavior will typically provide relevant information. Even if there is a long pattern of previous assaultive behavior, but this behavior is very person- and situation-specific (e.g., involving a family member and after heavy drinking), preventive interventions may be feasible. Such person-specific criminal acts could possibly be prevented by means of explicit and closely monitored conditions of release that require a parolee to join AA, to receive other indicated treatment, and to stay away from some specific persons, settings, and situations which suggest markedly increased probabilities that some violent act will occur. While such conditions are often used in a variety of probation and parole situations, the absence of close monitoring and the lack of proper support and assistance to the individual tend greatly to reduce the potential value and effectiveness of such supervision.

(3) What is the severity of harm or injury likely to be inflicted IF the dangerous acts were to recur?

Relevant case law (e.g., *Millard v. Cross*, *Cross v. Harris*, and *State v. Krol*) has pointed out the need to carefully balance the severity of harm likely to be inflicted by an individual and the loss of liberty to be suffered as a result of confinement. In order to undertake such balancing, courts need to have some idea of the severity of harm or injury that particular persons (or the community more generally) are likely to suffer if the released person engaged in further dangerous behavior. Understandably, the decision to release, and the conditions to be set for such release, will depend upon the expected criminal behavior, e.g., whether such acts are likely to involve indecent exposure, forgery and issuing of checks, or burglary, as contrasted with assault with a dangerous weapon, armed robbery, or attempted homicide.

As repeatedly noted above, the past history and pattern of criminal or other dangerous behavior (mostly reflected by arrests, prosecutions, convictions, and penal incarcerations) will tend to provide the most relevant information. There is not very much

criminological evidence that would indicate a high degree of "specialization" by chronic offenders. However, some specialization is evident, for example, in the case of "flashers" (exhibitionists), "peepers" (voyeurs), "paper hangers" (check passers), child molesters, burglars, and certain so-called "white collar" criminals. More often, recidivistic offenders display a degree of versatility. For example, the PROMIS Research Project (1977a) in the District of Columbia analyzed data pertaining to all arrests between January 1, 1971 and August 31, 1975; information was available regarding rearrests, reprosecutions, and reconvictions involving 45,575 defendants. It was found that persons who are repeatedly arrested, prosecuted, and convicted accounted for a disproportionately large share of the "street crime." Moreover,

A significant percentage of these repeat offenders switched between felonies and misdemeanors; for example, today's petty larceny defendant may have been involved in a past robbery case and might be the subject of a future homicide prosecution or simple assault arrest. (p. 13)

This same research project also found that defendants with previous violent crimes (i.e., homicide, assault, sexual assault, or robbery) had the highest proportion of rearrests for violent crimes. (See also Wolfgang et al. 1972.)

It appears that the extensiveness and seriousness of the person's criminal history (regardless of whether expressed in terms of arrests, prosecutions, or convictions), seem to be a rather good predictor of future criminality (PROMIS Research Project, 1977a).

- (4) Is the feared dangerous behavior of a nature that could appreciably be decreased, modified, or even prevented by certain environmental changes?

The conceptualization of behavior as a product of person-environment interactions has certain clinical and other practical implications. For example, in the case of an elderly and somewhat senile person who is being considered for involuntary hospitalization because he forgets to turn off the gas jets on his stove after cooking, such lapses could endanger not only the man himself in the event of a fire or gas explosion, but also his neighbors in the apartment building. Thus, he could be considered as "dangerous to himself and others." However, it is obvious that the "dangerousness" does not lie *within* the person; rather, it results from certain characteristics of the person and their interactions with a particular environment. The "dangerous" situation in this particular case might readily be corrected by replacing the individual's gas stove with an electric one.

The foregoing is, of course, a rather simple and even obvious illustration of the basic point. However, one might well wonder about the numbers of elderly persons who have been committed to mental hospitals because of similar or closely related circumstances (see, e.g., *Lake v. Cameron*;²⁵ Shah 1974). It would be fair to say that a large number of hospitalized mentally disabled persons, as well as incarcerated offenders, could very likely be handled in the community if our society were willing to provide the necessary resources to develop a wider range of less drastic alternatives for handling such persons and the problems that they present. It should be evident that the sociolegal decision to involuntarily confine a person considered to be "dangerous to himself or others" is *not* simply a reflection of the degree of danger posed by the person. It is also a reflection of the tolerance levels in the community for deviant behaviors, and of the lack of less restrictive alternatives available in the society. The latter relates very directly to the resources the society is willing to allocate to such social needs.

- (5) Are there certain treatment alternatives which relate more directly to the behaviors of specific concern, and which could more predictably reduce the likelihood of certain dangerous behaviors?

It has been noted that very real questions arise whether mental hospitals are the appropriate social institutions for treatment of *dangerous behaviors*—as contrasted with the treatment of serious mental disorders. Questions also arise about how the treatments typically used for psychiatric disorders relate to specific and episodic dangerous behaviors.

During the last two decades, various behavioral approaches to treatment have been developed and many of these can more specifically be related to the particular behaviors and problems of concern. A rather immense and also impressive literature has accumulated on behavioral approaches to treatment (Bandura 1969; Browning and Stover 1971; Franks and Wilson 1976; Kanfer and Phillips 1970; Krasner and Ullmann 1965; Lazarus 1971; Schwitzgebel and Kolb 1974; Ullmann and Krasner 1965; Wolpe 1958, 1969). Thus, with respect to individuals who are easily aroused to anger and who then engage in assaultive behaviors, certain behavioral (desensitization) techniques could be utilized to reduce the intensity of the anger-arousing stimuli. In one relevant study (Rimm et al. 1971), research subjects who became angry while driving and who exhibited behaviors such as swearing, tailgating, or driving at excessive speeds, were gradually exposed to descriptions of driving situations that made them angry. Prior to and during these exposures the subjects engaged in deep muscle relaxation. Following such treatment the subjects reported less anger in response to these

driving scenes; these reports were confirmed by galvanic skin response measures, but not by heart rate measures. The most relevant assessment would relate, of course, to the subsequent driving behavior of these subjects and whether the angry behaviors and aggressive driving were actually decreased.

Various other treatment approaches have been discussed in the literature and they offer promise for future development and application to some of the behaviors discussed here (Meichenbaum and Cameron 1973; Novaco 1973; Bower and Bower 1976). For example, exhibitionists are subject to indeterminate confinement under provisions of various "sexual psychopath" and "sexually dangerous persons" laws. Assuming a societal interest in providing treatment, certain less drastic treatment approaches could be used in outpatient settings, rather than relying on indeterminate confinement. Maletzky (1974) used "covert sensitization" in treating 10 exhibitionists, and the results indicated a substantial reduction of exhibitionistic behavior and fantasy during a 12-month period.

Various biologically oriented approaches to treatment of certain criminal and dangerous behaviors (viz., aggressive and sexual crimes) have also been reported and offer some potentially useful applications (Shah and Roth 1974).

These treatment approaches have not been mentioned to suggest that they are the only useful methods, nor to imply that their effectiveness has clearly been demonstrated and that they are ready for wide application to the range of dangerous behaviors discussed in this chapter. Rather, such therapeutic approaches have been subjected to considerable empirical study and evaluation; they do appear in many instances to be quite promising; they can more specifically be related to certain behavioral problems; and, if their effectiveness can further be confirmed, they would offer less restrictive alternatives to involuntary confinement. As Schwitzgebel (1977) has recently noted,

If treatment could become both brief and effective with minimal side-effects, the issue of the accuracy of predictions of dangerousness would not be as critical as it is today because false positive errors would not result in extensive deprivations of liberty. (p. 23)

Conclusion

This discussion has noted several decision points in the criminal justice and mental health systems where the issue of an individual's dangerousness and dispositional options is considered. Yet, despite

the extensive uses of the notion of dangerousness and the serious consequences that can follow such determinations, clear and precise definitions have long been overdue, and even now considerable clarification and further improvements are needed. The vagueness of a concept that is so critical for a variety of decisions can and does lead to numerous problems, since the notion can be pulled and stretched to fit various dispositional preferences. Similarly, the manner in which behavior is commonly conceptualized and various predictive assessments typically are made gives insufficient attention to the setting and situational variables that influence behavior. It was suggested that an interactionist perspective, which considers both individual and situational variables, offers many improvements over traditional personality trait, psychodynamic and situationism approaches.

Even though major decisions about people are based on assessments and predictions about their future dangerousness, it was indicated that there are immense technical difficulties inherent in predicting events with very low base rates. While such predictive tasks remain difficult, greater use of actuarial and statistical approaches could lead to several improvements. Even though predictive accuracy may only modestly be increased and false positives reduced to some degree, the major gain would relate to the markedly improved consistency and reliability of such assessments. Such improvements in consistency should enhance the equity and fairness of the decisions.

The manner in which therapeutic and social control objectives tend to become confused and confounded, to the detriment of the individual affected, was addressed at some length. For example, even though the societal value placed upon individual liberty leads to the use of rather demanding decision rules in the criminal process before conviction and incarceration can result, the values associated with coercive confinement undergo a major shift when the person is labeled as "mentally ill" and the purpose of the confinement is couched in the idiom of remediation and treatment. The application of the label "mentally ill" and the invocation of therapeutic objectives have for long had the effect of neutralizing the values and decision rules that would otherwise require us to let nine guilty men go free rather than risk the erroneous confinement of a single individual. Ironically, it is when our society proclaims therapeutic objectives and diverts "insane" and other mentally disordered persons from the punitive sanctions of the criminal justice system, that it manages also to exert more powerful social control. In recent years, however, courts have given major attention to these sources of inequity and unfairness and significant improvements have indeed been made.

The aforementioned discriminatory practices vis-a-vis the mentally ill tend to reinforce and to maintain longstanding social prejudices. For to the extent that policymakers, courts, and mental health professionals concentrate their concerns with "dangerous" behavior largely on the mentally ill, they help to perpetuate the myth that the mentally ill, as a group, are the most dangerous persons in our society. However, there is abundant empirical evidence to demonstrate that certain other groups (e.g., drunken drivers and recidivistic criminals) are clearly and convincingly more dangerous to the community. Thus, aside from the many legal and Constitutional concerns that are raised by such practices and are beginning to be addressed by courts and legal commentators (e.g., Note 1974), many questions are also raised about the fundamental unfairness of such discriminatory policies.

As Broderick (1971) has pointed out, if the basic object of a legal system in a society is to achieve the "idea of justice" for its members, its success at any given moment cannot be measured by the ideas it professes nor the constitutional or legal rules to which it pays lipservice. Rather, success must be measured in terms of the *actual achievement* of the guiding values and objectives. When societal institutions are found to be dysfunctional in reference to professed values and policy objectives, society must either modify the institutions or be forthright enough to abandon the professed values or strive diligently to bring the values closer to the reality which it wishes to preserve. Of course, when the policies themselves deviate from major societal values, appropriate changes in such policies must also be made—else the underlying goal values will tend to be depreciated and weakened.

Mental health professionals need, therefore, to consider very carefully the roles that they find themselves playing as agents of social control with respect to various categories of the mentally ill, rather than as caregivers and therapists. With better awareness of their own roles and with greater attention to ways in which empirical research findings can help to improve various clinical tasks, mental health professionals should join with lawyers, behavioral and social scientists, and other concerned citizens to make societal policies and practices with respect to the mentally ill more accountable and less hypocritical.

Footnotes

1. Section 730.50 of New York State's Criminal Procedure Law (Sept. 1971) mandates a determination of dangerousness for all indicted felony defendants found incompetent to stand trial.

2. Texas Code of Criminal Procedure, Art. 37.071, effective June 14, 1973. Section (b)(2) states, "Whether there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society" (p. 278).
3. The ongoing PROMIS research project in the District of Columbia sought to determine ways of predicting the likelihood of criminal recidivism. It was found that if a defendant had five or more arrests prior to the current arrest, the probability of subsequent arrest began to approach certainty. (PROMIS Research Project, 1977a, page 12.)
4. *McDonald v. United States*, 312 F.2d 847 (1962).
5. *Baxstrom v. Herold*, 383 U.S. 107 (1966).
6. *Bolton v. Harris*, 395 F.2d (1968).
7. *United States v. McNeil*, 434 F.2d 502 (1970).
8. *United States v. Ecker II*, 543 F.2d 178 (1976).
9. *State v. Carter*, 316 A.2d 449 (1974).
10. *State v. Krol*, 344 A.2d 289 (1975).
11. D.C. Code Sec. 21-501 to 21-591 (1967).
12. D.C. Code Sec. 24-301(e).
 Since such involuntary confinement stems from the commission of an act which is defined as a crime, we have here a police power concern, viz., to protect the community. Hence, it is interesting to note that both the indeterminate commitment following the *Bolton* hearing and also the criteria for release, refer to "dangerous to himself or others." Thus, despite the obvious police power concern involved, a wider net is used for confining the acquittee by also including the notion of "dangerous to himself."
13. D.C. Code, Sec. 24-301(e)-1.
14. *Bolton v. Harris*, op cit. FN 7, page 653.
15. *McDonald v. United States*, op cit. FN 5, page 851.
16. Judge Miller's dissenting opinion in *Hough v. United States*, 271 F.2d 458 (1959).
17. *Baxstrom v. Herold*, op cit. FN 6.
18. *Humphrey v. Cady*, 405 U.S. 504 (1972).
19. *Jackson v. Indiana*, 406 U.S. 715 (1972).
20. *Waite v. Jacobs*, 475 F.2d 392 (1973).
21. *Kent v. United States*, 383 U.S. 541, at 556 (1966).
22. *Millard v. Harris*, 406 F.2d 964 (1968).
23. *Cross v. Harris*, 418 F.2d 1095 (1969).
24. *State v. Krol*, op cit., FN 11.
25. *Lake v. Cameron*, 364 F.2d 657 (1966).

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