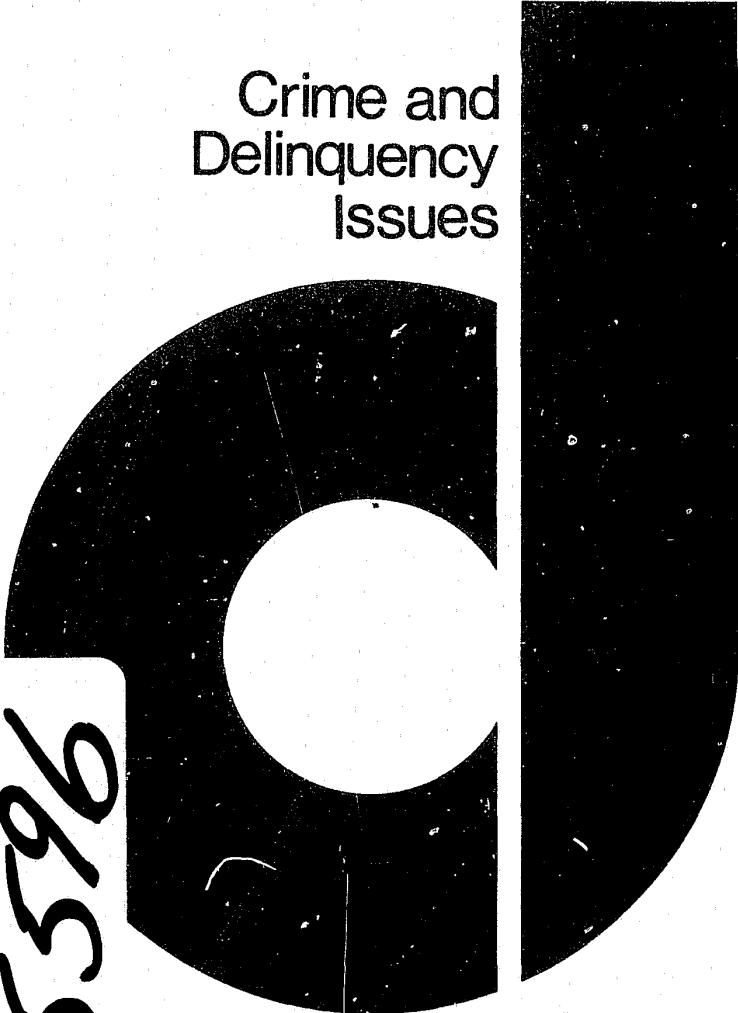


Decision-making in the Criminal Justice System: Reviews and Essays

Crime and
Delinquency
Issues



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CHAPTER I

Diagnosis, Classification, and Prediction

DON M. GOTTFREDSON

The three concepts, "diagnosis," "classification," and "prediction," often are used in discussions of decision-making in criminal justice agencies. They are related but not identical.

DIAGNOSIS

The word "diagnosis," which originally meant a distinguishing or a discrimination, refers in medicine to a decision concerning the nature of a diseased condition. It initially carried a similar meaning in psychiatry, clinical psychology, and social work. By analogy with physical illness, patients were sorted into categories of mental disorder. Later, the application of the word was extended so that a diagnosis was said to refer not only to the identification of an appropriate nosological category but also to a full understanding of the patient. This paralleled other developments in clinical psychology and social work which resulted in emphasis upon both individual uniqueness and the need to treat the whole person.

Some disenchantment with the idea of diagnosis as applied to offenders and thought relevant to decisions concerning their placement or disposition now may be discerned in criminal justice agencies and among their critics. The diagnosis-treatment model carried over from medicine was instrumental to the rehabilitation philosophy which became increasingly popular in corrections (less often called prisons!) in the last half century. The concept of the indeterminate sentence would allow the offender's diagnosis, appropriate treatment, and release "when ready." There has been, however, a repeated and frustrating failure to demonstrate the effectiveness, in reducing recidivism—i.e., repeated offending—by application of this model (Robison and Smith 1971). There has been also an increasing rejection of the "medical model" as an inappropriate guide to interventions applied to

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all who are defined as delinquent or criminal (Sarbin 1967; Sharma 1970; Szasz 1961, 1965, 1970).

The terms "delinquent" or "criminal" do not necessarily refer aptly to any state of the person, as would be expected to be the case with diagnosis of physical or mental disorder. Rather, they refer also to the state of the social system with which the person is involved as a result of his or her acts. That is, a "crime" refers to a combination of person(s) and event(s). A "criminal" may be defined operationally as an act of the person *and* a societal response—e.g., offense and conviction—but such definition is not limited to the description of the person and his or her acts. If such labelling is commonly a result of a *person's act plus system response*, it does not seem reasonable that it defines a need for treatment of the person. It is more reasonable to assume that there are social, medical, and psychological states that may be ascribed to individuals and that some of the states may be associated with a higher probability of criminal acts. We might seek to modify these states by appropriate treatments. Clearly, however, such states cannot be defined adequately by identification of a stage in the criminal justice process.

A "diagnosis" thus refers to some state of the person which may or may not be related to present or future events defined as delinquent or criminal. Since we may group together, for purposes of analysis, persons with similar diagnoses, or may use the datum of a diagnosis together with other data about the person, diagnoses may (or may not) be useful in classifications of persons. Such classifications may (or may not) be relevant to decision problems in criminal justice. They may (or may not) be useful for prediction of the outcomes to these decisions.

CLASSIFICATION

The concept, classification, refers to the allocation of entities to initially undefined classes in such a way that individuals in a class are in some sense similar or close to each other (Cormack 1971). It is to be distinguished from "identification" or "assignment," which refer to the process of choosing, for a new entity, which of a number of already defined classes should be selected for the allocation. There recently has been a growing literature in statistics, ecology, and biology concerning methods sometimes referred to as "numerical taxonomy," related to this general problem, some of which have found application in criminal justice (Babst, Gottfredson, and Ballard 1968; Fildes and Gottfredson 1972; Glaser 1962; Gottfredson, Ballard, and Lane

1963; MacNaughton-Smith 1963, 1965; Wilkins and MacNaughton-Smith 1964).

Generally, however, the concept, "classification," has been used in criminal justice agencies to refer to "assignment" or else to refer to various methods of categorization or typing (Grant 1961; Warren 1971; Sparks 1968). The latter methods may be clumped under the headings of "empirical" and "theoretical" approaches (Sparks 1968). The empirical approaches include the taxonomic methods mentioned but also any method which proceeds by grouping together individuals so that each group contains members which are as similar as possible to each other and as different as possible from all other groups, with the selection of features to be considered not dictated by any particular theory. The approach is atheoretical, but this does not mean it is necessarily antitheoretical or that variables derived from theoretical constructions might not be used. The theoretical approach, however, begins with theory, from which the bases for classification are deduced. Examples might include typologies derived from psychiatric (Aichorn 1935; Bloch and Flynn 1956; Cormier et al. 1959; Erikson 1950; Jenkins and Hewitt 1944; Redl 1956), sociological (Miller 1959; Schrag 1944; Sykes 1958), and psychological theory (Argyle 1961; Gough and Peterson 1952; Peterson, Quay, and Cameron 1959; Sullivan, Grant and Grant 1956; Venezia 1968).

PREDICTION

The concept, prediction, refers in criminology to an assessment of a person's expected future behavior or an expected future state of the criminal justice system. Some criterion of future performance (such as delinquent or criminal acts or parole violation behavior) must be defined. This definition must be independent of any steps performed in arriving at the prediction; and thus prediction involves two independent assessments of persons, separated over time. On the basis of a first assessment, predictors may be established by any means whatever—including any data from diagnostic procedures, any classification scheme, or, indeed, any attribute or measure related to the individual. Commonly, items pertaining to the person's life history, successes and failures, psychological test scores, or family situation are employed as candidates to become predictors. Thus, any data thought to constitute information (to reduce uncertainty with respect to the expected behavior) may provide the predictors. The second assessment establishes the classifications of performance to be predicted. The predictions provide estimates of the expected values for

these criterion categories, and these estimates should be determined from earlier empirical investigations of the relations between the predictors and the criterion. Those predictor candidates found not to be useful in improving prediction are discarded. Thus, on the basis of previously observed relations between predictor and criterion classifications, one seeks to determine, for each category of persons, the most probable outcome in terms of the criterion.

The predictor categories may, as already asserted, represent any attribute or measure concerning the individual. They may be defined by what the person says about himself or others, ink blots, or other stimuli—the variety of which is limited only by investigators' imaginations. They may be established by what others say—i.e., by the observations or judgments of others, singly or in groups—and this may include assessments of the person's abilities, interests, or perceptions. They may be defined by what the person has done previously, whether these be laudable achievements or criminal acts. They may be defined by what is done to or with the person, including exposure to specific treatment programs—that is, by placement decisions at any stage of the criminal justice process.

INTERRELATIONS OF THE CONCEPTS, DIAGNOSIS, CLASSIFICATION, AND PREDICTION

The relations among these concepts as used here may now be identified. One may, by many methods, make an assessment of an individual in order to help describe some state of that person. Such diagnoses may be relevant to his or her health or well-being. They may provide information useful for classifications for a variety of purposes. Persons may be classified in various ways to serve any number of objectives. One common aim is that of prediction. Thus, data from diagnostic procedures and from classification efforts may or may not provide information useful for prediction of some single criterion or of various criteria. If they do not, this does not imply that such data are useless for other purposes; but the nature of criminal justice decisions is such that a predictive value of the information used for decision-making often is implied. Thus, it is seen that diagnostic and classification data may or may not constitute information for decision-making. The same is true for data with predictive utility, depending upon the decision problem.

DIAGNOSIS, CLASSIFICATION, AND PREDICTION

The concepts, *reliability* and *validity*, are central to critical assessments of diagnostic, classification, or prediction procedures. Reliability refers to consistency or stability of repeated observations, scores, or classifications. A procedure is said to be reliable to the extent that repetitions of the procedure lead to similar observations or classifications. The concept of validity has reference to the purposes of the procedures; the question of validity asks how well the method works in achieving those purposes. In the case of diagnoses, validity refers to the aptness of description of the state of the person when that may be assessed by some external, independent standard. Classifications, too, are by themselves, merely descriptive; so that the same may be said with respect to groups of persons. When it comes to prediction, validity refers to the degree to which earlier assessments are related demonstrably to later criterion classifications in new samples.

The criminology literature includes many reports of "prediction" studies in which the crucial step of cross-validation, testing the methods developed by application to new samples, is missing. Such studies must be viewed very critically. They may provide useful preliminary work helpful to later prediction studies more worthy of that name; but even the cautious interpretations of validity often made in this circumstance may be quite unwarranted. The studies may even be completely unreliable and invalid (Cureton 1967).

If no estimate of future behavior can be made with certainty, then statements of degree of probability are appropriate. Predictions properly are applied not to individuals but to groups of persons similar with respect to some set of characteristics. Thus, persons are classified; and then statements are made about the expected performance of members of the classes. The performance outcomes to be expected for specific classes of persons are those which provide the most probable values for the population as a whole.

Any prediction method may be regarded as having, or lacking, not one but many validities of varying degrees. Since validity refers to the relation between a specific criterion measure and some earlier assessment, it is dependent upon the particular criterion used. Thus, a prediction method has as many validities as there are criterion measures to be predicted. Just as a test of scholastic achievement taken after high school might provide valid predictions of grade-point average in college but could be invalid for estimating marital stability, a delinquency prediction method might have some validity for judging the likelihood of, say, adjudication as a delinquent before age 18 but might provide no information concerning the probability of adult crime, high school completion, or conviction for car theft. And it must be recognized that the issue of validity is one of degree; pre-

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diction methods are not sufficiently described merely as valid or invalid. Rather, statistical statements of the relative validity—e.g., in terms of accuracy of predictions in test samples—are in order.

When there is a predictive purpose, all diagnostic and classification procedures, whether they be interview assessments, results of projective testing, expert judgments, or codifications of life history variables, are bound together by the concept of validity. The predictive value is shown by the degree to which the method is valid with respect to specific criterion classifications; and individual stylistic preferences of research workers, clinicians, judges, administrators, or others cannot logically enter the argument.

CRIMINAL JUSTICE DECISIONS

The concepts, diagnosis, classification, and prediction, may be reviewed briefly with respect to decisions made during each of the four major aspects of the criminal justice system discussed in subsequent chapters. These are decisions by police, prosecutors, judges, and correctional functionaries. Some persons pass through all these sets of decisions in their careers from arrest to final discharge; and many, unfortunately, repeat the process.

It should be noted that in discussing these decisions we certainly are not talking about the entire delinquency and crime problem. The criminal justice system may be irrelevant to most acts which, if known, would be defined as delinquent or criminal. In a national United States sample of 13- to 16-year-olds, 88 percent reported committing at least one chargeable offense in the prior 3 years. Only 9 percent were detected by the police, only 4 percent received police records, fewer than 2 percent were referred to court, and a little more than 1 percent were adjudicated delinquent. The acts of the 3 percent caught by police represented less than 3 percent of their total chargeable acts (Williams and Gold 1972).

Similarly, in discussing police, prosecution, sentencing, and correctional decisions, various additional critical decision points are left out. Before moving to the consideration of those four general areas, therefore, some aspects of decisions related to delinquency prevention, juvenile detention, and pre-trial release are mentioned.

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