A Manual of Parole Prediction

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Preface

Illinois has been a leader in the United States in the systematic, scientific investigation of crime, and in the application of social science knowledge and techniques to the treatment of the convicted offender. This monograph represents an experience with one aspect of the correctional problem. It brings up to date the results of twenty years of study and experiment in Illinois with techniques designed to bring about the best results in the selection of candidates for parole. These years of effort have been rewarding; they are concrete evidence of the great contribution which can be made by academic research and the application of the knowledge gained thereby to specific problems in correctional administration.

We in Illinois shall continue to avail ourselves of the privilege of using our universities and their scientific resources in advancing knowledge about crime and its treatment. Efforts such as represented here can go far toward improving the conditions of parole selection and developing the parole system as a release procedure. As Governor Adlai E. Stevenson said in addressing the Eightieth Congress of the American Prison Association in St. Louis, "A parole system worthy of the name must put genuine content into its mechanisms of selection and its standards of supervision if it is to become something more than a mere legal escape route to the outside world."

JOSEPH D. LOHMAN, Chairman

Division of Correction

State of Illinois

January 15, 1951

Acknowledgments

This monograph reflects twenty years of experimentation and research in the application of parole prediction methods in Illinois. I am unable fully to express my indebtedness to the former correctional workers and present associates whose thinking and research effort have contributed to the continuous development of prediction as an aid to parole selection procedures.

I wish to express deep appreciation to Professor Ernest W. Burgess, chairman of the Department of Sociology, University of Chicago, and to Professor Thorsten Sellin, chairman of the Department of Sociology, University of Pennsylvania. They provided constant encouragement, criticism, and advice in the planning, organization, and writing of this report.

I am particularly indebted also to Joseph D. Lohman, chairman of the Illinois Division of Correction, who gave generously of his time and effort in criticizing and editing the original draft.

Since the monograph is based primarily on my own research and experience with parole prediction and selection as a sociologist-actuary with the Illinois Division of Correction, I accept responsibility for any defects in the research results or errors of observation.

L. E. O.

Introduction

Fully half of the prisoners released from our state and federal penal institutions for adults are released on parole; most of the others remain until they have served their full sentence. Parole, therefore, is today the most important single type of release employed in returning serious offenders to society.

Parole is a form of conditional release which permits a prisoner to leave the institution after he has served part of the term imposed on him by the court. It is distinguished from other forms of release in that the parolee is placed under the supervision of a parole officer, who will help him re-establish himself as a law-abiding citizen. The parole officer is supposed to continue, in a different form, the correctional treatment begun in the institution.

Since first introduced in the United States some seventy years ago, parole has constantly grown in popularity. There are several reasons for this fact. Some people see in parole a means of reducing the length of imprisonment as a reward for the good behavior of the prisoner. Some find it useful because it relieves the overcrowding of prisons and makes the construction of new buildings unnecessary. Some defend it because it costs less to supervise an offender on parole than to maintain him in prison. Others feel that prison life has a degenerating effect on those who experience it and that some form of treatment in restricted liberty is likely to be more success-

ful. Generally speaking, it is recognized today that a period of imprisonment should be followed by a period during which the offender can be guided, assisted, and supervised in his efforts to lead an orderly life, and that parole is therefore an absolutely essential part of a good correctional system.

If parole is to be most effective, a prisoner should be placed on parole at the moment when—taking into account the limitations of the law and the sentence, the effect of institutional life, and the prospect of social rehabilitation—both he and the community could profit most by such a step. The paroling authority therefore should exercise discretionary power. This thought has been well expressed in the "Declaration of Principles of Parole," adopted April 18, 1939 by the National Parole Conference, the second principle of which reads: "The sentencing and parole laws should endow the paroling authority with broad discretion in determining the time and conditions of release."

Such discretionary power has in fact been granted to boards of parole in many states, and much of the criticism of parole has hinged on the claim that it has been abused or unwisely used.

Paroling authorities can be said to have three main functions. The first is to place prisoners on parole; second, to aid and supervise them while they remain on parole; and third, to curtail parole and return the offender to the institution if the experiment fails. The skill with which the first of these tasks is performed largely determines the success of the second and the extent to which recourse must be had to the third. The "broad discretion in determining the time and conditions of release" must, then, be carefully used. The choice of prisoners to be paroled and the choice of the moment when paroles are

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to take effect become the crucial job of the paroling authority.

We need only mention the fact that parole selection in the past has often been haphazard and based on inadequate data. The best paroling authorities today, however, try to follow the third principle in the Declaration mentioned above: "The paroling authority should have complete and reliable information concerning the prisoner, his background and the situation which will confront him on his release."

Even when such information is at the disposal of the authority, the question of its evaluation arises. What items of information should be given greatest consideration?

Normally, a paroling authority would not release a prisoner on parole if it could foresee that he would rapidly or spectacularly fail to make good, but this often happens in spite of the best intentions because of the inherent difficulties of predicting human conduct. Any knowledge, therefore, which may assist the authority in making a wise parole selection will improve its work and render such correctional treatment more useful to the parolee and more acceptable to the community.

In the past two decades social scientists have made significant progress in their efforts to find out which prisoners succeed on parole and which fail, and under what conditions success or failure occurs. Out of their research has grown a conviction that, notwithstanding the difficulties involved, it is possible to predict to some extent how prisoners will behave on parole. One state, Illinois, has made use of the techniques developed by this research since 1933.

This monograph by Lloyd E. Ohlin, research sociologist of the Illinois Division of Correction, is a report on the development of the Illinois method of selection for

parole. It sets forth the different steps involved in the construction and use of prediction tables. It presents a simple and an efficient procedure for making predictions of success or failure on parole. The report is based on a great mass of data on more than 17,000 prisoners paroled from the Joliet-Stateville and Menard Divisions of the Illinois State Penitentiary System from 1925 to 1945. The collection of these data was made possible through the appointment of a sociologist-actuary in each of the three adult penal institutions of the state. Data pertaining to the Pontiac Division are not included since they were not available at the time of the present study. These Illinois materials have permitted the preparation of the first manual on parole selection in which the theory and methods of parole prediction have been set forth in a form that can be applied in other states.

Although the predictive methods described in this book are limited to parole selection, they are also applicable to several other fields of delinquency and criminality. They could now be introduced, at least experimentally and for demonstration purposes, in such additional areas as the identification of predelinquent children, the disposition of cases in the juvenile court, parole from institutional training schools and reformatories, and the selection of adults for probation.

The value of a predictive instrument of parole success is not confined to selecting the best risks for parole. Prediction may be just as important or even more important in parole supervision, but as yet it has not been so employed in a systematic way. It is, however, readily apparent that if men have different probabilities of violation, they could be subject to differences in kind and degree of parole supervision. For example, a man who

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falls in a group having only one chance in twenty of violating parole obviously requires less supervision than one whose chances are fifteen out of twenty. Parole officers, therefore, should find predictive tables of value in helping them determine which men should have the strictest supervision and which less supervision. They can then concentrate their efforts and attention to a greater extent on those who are most likely to resume association with other criminals and to commit new crimes.

In applying prediction methods, perhaps more effective parole selection and supervision can be achieved through the direct use of data about the proposed parole situation. It is feasible with professionally trained parole officers to work out an ideal plan of the activities of the man on parole. Let us assume that such a plan would involve a number of essential provisions: First, that he will find on his release from prison that his wife and family are eagerly awaiting his return and that his relationships with them have been satisfactorily maintained while in prison. Second, that his old employer has a position which will be immediately ready for him upon his return to the community. Third, that he will be received into a social group or club of law-abiding citizens which gives him a sense of participation in his neighborhood. Fourth, that he has recreational interests and that there is opportunity for their wholesome expression in the community. Fifth, that a good relationship has already been established with his parole officer to whom he can turn when in need of advice and assistance. Other provisions might be added but those mentioned are sufficient to suggest the conditions under which a man would be most likely to succeed on parole. They also indicate the ideal program to which a parole officer might direct his energies in preparing for the return of the paroled man to his family, neighborhood, and community.

In only rare cases will ideal conditions exist. The actual parole situation to which a man returns almost always will vary to a greater or less degree from the ideal. The optimum conditions of parole, however, may be used as the standards by which the actual conditions of the parole situation may be measured. For example, five points might be assigned for each optimum condition in the parole plan. Actually, on any item of the plan a man might receive a grade of 0, 1, 2, 3, or 4. The total of his scores might then be used to predict the possibilities of success of the man on parole. Prediction on the basis of the parole plan, however, should be used in close connection with the prediction based on the person's background, personality, and prison conduct.

Much remains to be accomplished in developing predictive instruments which will be more discriminating and more efficient in parole selection. A few of these improvements are suggested here:

Complementation by Clinical Studies. Statistical prediction as set forth in this manual has the great advantage of objectivity. It also has what is technically known as high reliability. By objectivity is meant that the predictive items refer to observable behavior that can be verified, as can the previous criminal record. Reliability signifies that two or more persons using this predictive instrument will classify different offenders into the same risk groups.

Statistical prediction, however, has one serious limitation which might be termed a defect of its virtue. It predicts for a group of cases rather than for each individual and, consequently, is concerned with the way in which a given factor operates in the majority of cases disregarding individual variations. It is, however, important to make an intensive study of each individual to find out his particular attitudes and motivations. For in the present

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stage of its development statistical prediction deals with the external rather than the subjective aspects of behavior.

Everyone recognizes that the prisoner's attitude is important. Especially significant are clinical studies to find out the prisoner's motivations and any personality problems which may interfere with his reformation. Intensive study is needed to probe into his subjective life. Such study is most rewarding when the man first enters prison and during the period preceding his becoming a member of the prison community. A favorable situation is the diagnostic depot where he is detained for study in order to determine the most suitable placement for him in the institution. At present also there are a growing number of personality tests applicable to the study of criminals. Statistical predictive instruments in their present form do not take account of the data obtainable by such interviews and by personality tests. This material should be used in conjunction with the findings of statistical prediction.

Ratings of the Prisoner by the Staff of the Institution. Many members of the staff are in more or less intimate touch with the prison inmates. They form judgments on their behavior and attitudes and on the probabilities of their going straight upon release. This source of knowledge has not as yet been utilized systematically in prediction work.

Further study is needed to determine the most significant information to be secured from personnel such as chaplains, teachers, work supervisors, as well as the psychiatrist, psychologist, sociologist, and social workers. Ratings should be secured upon behavior, attitudes, and the forecast of probable success on parole. Ratings by three or more competent persons should be secured on each man, because experience has shown that a combina-

tion of several judgments generally has greater validity. If ratings by the prison staff are found to correlate with the conduct of men on parole, they may then be incorporated into statistical prediction. These data may fill a gap in the items now being used.

Record of Achievement in Prison. At present inmates get a reduction in the time of their sentence by reason of a good conduct record in prison. No similar diminution in time served is granted for other evidence of achievement. Yet the incentive to regain freedom is the strongest of all motives of prisoners. It should be capitalized upon in helping to determine when a man should be released on parole. It can be advantageously utilized in preparing a man to make a good adjustment to society.

What are the ways in which a prison experience may contribute to a man's rehabilitation? First, by taking advantage of prison facilities for the correction of any and all remediable physical disabilities by which the prisoner is handicapped. Second, by a program of vocational education which will enable him to hold a job in industry upon release. Third, by an educational course to fill in gaps in the man's previous schooling. If the prisoner understood that achievement in health, vocational education, and general education could increase his eligibility for parole, he would be motivated to put strenuous efforts into making progress in these fields. In so doing he would also be fitting himself to be a better risk on parole.

Further Research in Predictive Methods. Much research has already been undertaken on the prediction of success or failure not only in parole but in other fields of criminal rehabilitation. Ten years ago a committee of the Social Science Research Council made a study of how predictive methods might be improved in studies of success in school, in a vocation, in marriage, and in

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criminal rehabilitation. The published volume, entitled *The Prediction of Personal Adjustment* by Paul Horst and collaborators, gave an impetus to further research. There is need for still further study. As Dr. Ohlin points out in the present volume, continuous research is necessary as a basis for the revision of the prediction instruments.

It is highly desirable to try out in other states the items of background, personality, and prison behavior found to be significant in Illinois. Do these items have general applicability or are they limited to Illinois and perhaps to adjoining states?

Important also is research to determine whether predictive items retain their efficiency through time. Or do economic and social changes in our society decrease or render null and void the predictive value of items earlier found to have predictive significance?

Besides these studies of possible changes in predictive items bearing on time and location, much further research needs to be undertaken. What new predictive items may be discovered? What is the predictive value of personality tests of the available standardized forms? May not personality tests especially suited to the study of the criminal and of his rehabilitation be devised? What is the best possible method of prediction? Are there alternative techniques that would improve on the parole prediction methods now in use?

Although the primary purpose of the present volume is to make readily available to all concerned with selection for parole the experience of Illinois with the prediction method now in use, the hope is that it may also stimulate further investigation and advances in technique.

ERNEST W. BURGESS THORSTEN SELLIN



1. Conceptions of Parole

Objects of our cultural life are viewed differently according to the position in society of the particular observer. This statement clearly applies to conceptions about parole, which vary with one's contact with the parole system, membership in various social groups, principal interests, and social training. To the prisoner parole means something quite different from what it does to the parole board member, the professional politician, police officer, social scientist, reporter, reformer, and the man on the street.

The actual importance of the views held concerning parole is directly related to one's ability to influence the operation of the parole system. Thus in practice parole is a product of the acts, understandings, and misunderstandings of the persons able to exert the greatest influence. Their effect on the actual operation of the parole system has never been studied closely. As a result there exists a serious gap in our knowledge which has undoubtedly hindered the development of parole. A full treatment of the problem requires extensive research, but an illustration of the effect of misunderstanding is the frequent confusion of such different functions as pardon and parole.

Parole and Pardon

Misunderstanding of the distinction between pardon and parole is not limited to the general public; it is found, to a lesser degree, even among prisoners and

correctional authorities. The Attorney General's Survey of Release Procedures, published in 1939, stressed the prevalence of this confusion and pointed out clearly the basic differences between these two types of release.

Parole . . . is the release of an offender from a penal or correctional institution, after he has served a portion of his sentence, under the continued custody of the State and under conditions that permit his reincarceration in the event of misbehavior. Properly conceived, parole contains none of the elements of executive clemency, as is the case of pardon. It has no connection with forgiveness, nor is it designed as a reward for good conduct in the institution. The basic purpose of parole is, or should be, to bridge the gap between the closely ordered life within the prison walls and the freedom of normal community living.¹

Simply defining pardon and parole, however, is not enough, since the existing confusion is not merely a matter of words. In many states parole applications and pardon petitions are heard, reviewed, and acted upon by the same authority. Sometimes parole is improperly used as a substitute for pardon. The effect of such a practice is to equate the two types of release in public thinking. Both appear to be an expression of leniency or absolution of guilt and the absence of adequate parole supervision tends to substantiate such a view. As a result the very nature of parole is frequently misunderstood. It is regarded by the press and the public as a kind of sentimental weakness on the part of the correctional authorities. Somewhat similar views on parole are sometimes held even by offenders. Many of them manage to keep out of trouble in prison but on parole transgress the rules. Clearly they do not regard parole as a continuation of

¹ The Attorney General's Survey of Release Procedures. Vol. 4, Parole. U.S. Dept. of Justice, Washington, 1939, p. 4.

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custody under less restricted conditions or as a means of aiding their readjustment to society. Correctional authorities often reflect the same view by referring to parole as a means of "giving a fellow a break" or as a "reward for good behavior." Their emphasis is not on its rehabilitative possibilities but on parole as a form of reward or expression of leniency, as is indicated in a report of the president of the first Wisconsin Conference on State and Local Organization for Crime Control:

One of the greatest handicaps of parole is that in public opinion, the release of a prisoner under parole procedure is believed to be an act of clemency. The public is not wholly to blame for this wrong conception. Prison officials, boards of administration, and parole boards have contributed to build this erroneous belief through many years. The untrained and inexperienced prison guard who, to promote fear in the mind of a prisoner, whispers to him: "I'll break you for parole"; the prosecuting attorney who, to make easy his way in the court, says to an accused person: "If you plead guilty, you will get a light sentence, and I'll recommend early parole"; the judge who, in conference with a convicted man whom he knows to be a second offender of a felony, and upon whom he had just imposed a heavy sentence, and who says to him: "You will be eligible for parole at the expiration of your minimum"; the politician who says to an erring acquaintance: "I'll appeal to the parole board, and that board will give you an early release"; all these and many other types by the very nature of their statements implant in the mind of the offender the belief that parole is clemency; that it should be granted on the basis of the bargaining entered into prior to the trial or on the basis of friendships or other emotional considerations. These not only do harm to the prisoner, but the persistence of them perpetuates and strengthens an erroneous and harmful conception of parole.1

¹ Hannan, John J., "The Philosophy and Work of a Parole Board," Proceedings of First Wisconsin Conference on State and Local Organization for Crime Control, 1937, pp. 137-138.

It is thus apparent that the views held by the public, the press, professional politicians, prisoners, and correctional authorities about parole have an important effect on the operation of the parole system. Fortunately views in agreement with a proper conception of parole and pardon are becoming more common. The increasing acceptance of a bona fide parole concept will undoubtedly give rise to a demand for more adequate supervision and a more effective parole system.

Parole and the Public

Parole, pardon, and unconditional discharge from prison are final stages in the long process which society has developed for dealing with the criminal. Of these three forms of release parole is the main target for criticism. Unlike pardon, the decision to grant parole does not rest on considerations of equity, leniency, or miscarriage of justice. Unlike unconditional discharge which occurs automatically at the expiration of sentence, parole requires the exercise of administrative judgment. The case for parole rests on the belief that the interests of society and of certain offenders would best be served by releasing these offenders before their sentences expire, under the continued supervision of the state. Notwithstanding the increasing acceptance of this belief, public criticism is continuous. This criticism highlights the importance of the selection process in parole, but it distorts the picture by ignoring the equally important areas of preparation for parole and parole supervision. The potentialities of careful parole selection can only be fully realized where intensive pre-parole study and treatment prepare the offender to take on the obligations of conventional living, and where careful supervision aids the adjustment of the paroled man to life outside prison walls.

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Public concern over the granting of parole to the exclusion of treatment and supervision poses many practical problems in selection procedures which are treated more fully in Chapter 2. Let us ask here why public attention is focused on the granting of parole and what are the common views held on parole selection.

The object of parole selection is to reach a decision as to the advisability of granting, postponing, or denying parole. Responsibility for it in most states rests squarely on members of the parole board and when they make unwise decisions or untoward incidents occur, the press and interested social groups are harsh in their criticism. The result is that parole authorities become very sensitive to popular comment and the process of parole selection acquires a certain dramatic quality not unlike that characterizing court decisions. The values and interests of society are brought to a sharp focus and are balanced against the needs of the individual. The conflict of ethical ideas such as the opposition between principles of rehabilitation and punishment serves to shape the final decision.

The tendency of the press and general public is to accept rehabilitation and supervised release in principle more often than in fact. The storms of protest that arise when notorious criminals are being considered for parole or when severe parole violations have occurred give voice to opinions denouncing the very objectives on which parole is based. The parole board is suspected of malpractice and charged with undue leniency in releasing criminals to prey upon society. Although parole authorities have not always been free of venality and political pressure, the frequency of these protests suggests that the purpose and procedures of the parole system are neither generally understood nor fully accepted. Public concern

about meeting the needs of the offender, and protecting society through efforts to rehabilitate the criminal, is less apparent than the urge to keep the offender in prison. Awareness of this public sentiment limits, in many cases, the action that parole authorities feel free to take.

Parole and the Offender

Parole decisions are not evaluated by the offender on the grounds of protection of society. They are regarded as being favorable or unfavorable to release. Although prisoners' views on parole selection vary according to their status as parole applicants, there is, however, a rather well-defined body of beliefs in the prison community concerning the actual influences which bring about a favorable or unfavorable parole decision. It is frequently impossible to find any evidence to support these beliefs other than hearsay or the authority of constant repetition. But as long as they prevail they will be reflected in the offender's attitude toward parole selection and the parole situation.

The following excerpts from some of the statements made by offenders during pre-parole interviews indicate the factors which they believe influence parole board decisions. Blaming the newspapers for unfavorable decisions is quite common:

I sure hope I got one this time. Seems like every time I come up some parolee knocks off a cop or something—the newspapers blow their lid about releasing guys on parole and I get another set.

Often the trial judge or prosecuting attorney is regarded as being prejudiced and actively opposed to a favorable decision:

I don't know why they keep turning me down, but I know they listen to what the judge and the state's attorney say—

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and that state's attorney had it in for me and swore he'd see I never got out.

In cases of well-known crimes, it is felt that the protests of public feeling, as expressed in the press, influence the parole decision unfavorably:

I don't suppose I have much chance to get a break. Every time I come up for a hearing the newspapers raise a big squawk and back comes another denial.

It is generally believed that unfavorable letters from the victims, their relatives, or friends provide sufficient grounds for an unfavorable action:

I know who's keeping me in here all right—it's that girl's old man. He keeps rapping me all the time. If he'd just let up once, I'd get out.

Political influence is often considered a potent factor in obtaining a release:

I ain't worried about this here parole. I got some pretty big guys working for me down there. They'll get around and pull a few strings and out I'll go. There ain't much against me anyhow but knowin' a few of the right people don't hurt none either.

It is believed that extreme care should be taken in the parole hearing not to stir up any prejudice on the part of the board members:

I made a mistake I guess—I blew up in there at my last hearing and told them off on a lot of things. I was disgusted with myself afterwards because it just doesn't pay to get them mad at you. I hurt my chances for good that time I guess.

The opinion is occasionally expressed that parole board decisions are a matter of whim and therefore completely unpredictable:

I sure wish I knew what makes them hand out a parole. Guys I figure are a cinch to make it get turned down and

some no-good jokers will make it every time. I figure they must throw the sheets in front of a fan and the ones that land right side up get a parole.

Many of the more sophisticated and advanced offenders regard parole as dependent on the payment of money:

I ain't getting no parole and I know it. Now if I had some of that green stuff spread around in the right places and working for me down there. . . .

A substantial criminal record is thought to have an adverse effect:

I know I'm going to get "Max X" on this. Look at that record. That's what'll keep me in here. I've done enough time for it already but that don't seem to matter.

I look at the whole thing differently now too. I'm getting old and haven't got a dime—getting fed up with always doing time. But how am I going to convince them I've changed once they take a look at that record?

The notion is frequently encountered that there exists a definite quota of men who will be paroled each month. The object, therefore, is to receive parole consideration when the number being heard for parole is small:

I didn't want to be heard this month. There's too many guys going up. I wanted to get on a month where there were just a few guys and a lot of cases with tough raps.

The offender who has been imprisoned for a long time and has lost all contact with the outside world usually expresses discouragement in the face of his inability to arrange a parole situation:

I don't see how I'm ever going to get out. I've got no one pulling for me—no friends—no family—no one to get me a job. I suppose they'd try to do what they could here but times are getting tough. . . .

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Certain offenses, such as sex offenses and murder, are regarded as blocking any kind of favorable parole consideration until the offender has served a great many years:

Sure I'd like to get out—it ain't that. Look at my rap [indecent liberties]—and a bum one at that. I never saw the kid before. But nobody'd believe me in court and they won't now. I only got in a little time too and I guess I'll have to do it all.

In some instances it is hoped that the report of mitigating circumstances surrounding the offense may exert a favorable influence on the parole decision:

I've never been in trouble before—my wife was sick, the kids were hungry, and I couldn't find work no place. What would you do? I don't see how they can hold a guy when he was forced into it like that.

Unfavorable recommendations from the professional staff are thought to exert a much stronger effect than favorable comments:

I don't know whether there is any truth to it or not but all these cons say that the bug doctors can't do any good but they can do a lot of harm when they write in reports to the board.

Occasionally more balanced and objective evaluations are offered. In general, however, the statements express strong feelings of anxiety despite the attitude of careless indifference that is commonly assumed. Unfortunately the tremendous motivation aroused by the possibility of parole often remains untapped for lack of constructive channels of expression and recognition. Many offenders become depressed by their inability to find some means of demonstrating a change in their attitude toward criminal behavior. Perhaps too little effort has been

directed by parole authorities toward setting up lines of communication with the offender. An adequate interchange of information between him and the parole board would relieve much of the anxiety which now feeds on rumor and hearsay. The proper coordination of classification and parole programs might serve to direct the drive created by the possibility of parole to improving his education generally and to learning conventional patterns of behavior.

The attitude which an offender has toward the selection process subtly enters into the nature of the final decision. Some indication of its effect is revealed in the reports of the professional staff and sometimes in the parole hearing. It is important to understand this attitude since it will also influence behavior on parole.

Factors in the Parole Decision

Simply stated, the decision to parole is based on a careful weighing of the risk of a favorable or unfavorable decision both to the individual and to society. In practice it appears as a compromise between a variety of influences. The ethical and moral convictions of the parole board members, their background of experience, training in the sciences of human behavior, acquaintance with the specific causes of crime, and knowledge of the actual working of our system of criminal justice are all important factors. The probable reaction of the press and of the public, political pressure and pressure of interested groups, the recommendations of persons the offender has injured, and the recommendations of the offender's friends and relatives are also reflected in the parole decision. Considerations which involve the offender count heavily, such as the nature of his offense, extent of his criminal record, his adjustment and response to treat-

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ment, his attitude toward parole, evidence of rehabilitation, and the character of his proposed parole situation. In addition to all these factors the recommendations of the judge, state's attorney, and prison professional staff receive recognition. It is thus apparent that the task of reaching a decision is a very difficult one. As one inmate remarked, "That job's so tough I wouldn't be a parole board member even if I could get a parole by being one."

2. The Problem of Parole Selection

Despite the difficulties involved in reaching parole decisions, until recent years little effort has been directed toward supplying parole boards with complete and accurate data upon which their judgments could be based. The general feeling seems to have been that, if men possessing common sense were appointed to these boards, equitable decisions would follow as a matter of course. Parole authorities were often expected to render final judgment on the basis of a brief talk with the inmate and a summary of the circumstances of his offense. Reliance was placed on their intuitive powers developed in judging the character of their former associates in business, legal practice, or politics. Unfortunately such a situation still exists in some states.

It is becoming increasingly apparent, however, that parole decisions can be no sounder than the information upon which they are based. Judgment that comes from an ability to see the relation of attitudes, experiences, and behavior in the lives of other men has value in the paroleselection process, but it cannot compensate for the lack of intensive, reliable information on all aspects of a particular case. In choosing men for parole, as in choosing men for positions in industry, greater efficiency is achieved when the selection is made by someone who is adequately trained and fully supplied with the necessary information.

PROBLEM AREAS IN THE PAROLE DECISION

The process of reaching parole decisions is becoming an important and rewarding object of study. As knowledge of this crucial process grows there will be a clearer understanding of what is needed to reduce errors to a minimum. For the present, however, effective decisionmaking must first define the considerations basic to the final decision.

Alternative Objectives of Treatment

Three major problem areas are reflected in careful parole decisions. The first involves not so much gathering information as defining a point of view. Parole board members must consciously reconcile conflicting philosophies regarding the purpose of imprisonment. The kind of parole decision made will vary greatly, depending on whether punishment or rehabilitation is thought to be the major objective in treatment of the offender. Adherence to the goal of punishment may decrease the chances of parole success by delaying the granting of parole beyond the time when the offender's attitude and parole situation show the maximum possible preparation for adjustment. Conversely, parole may be granted because "the offender has been punished enough," even though he is ill prepared to succeed.

Taking a stand on such a question is not easy. The position of each board member will vary with his knowledge of criminology and understanding of the effects of different modes of treatment. He is not, however, entirely free to give expression to his own belief. As a public representative he may be required to act in accordance with the prevailing public sentiment in certain cases, or compromise in some measure his own views. The problem

confronting him in such cases is not an academic one. For example, it is interesting to note in reading the minutes of a parole board conference on a notorious criminal case that the issue as to which of the conflicting philosophies of treatment should guide the members of the board in making their decision is mentioned again and again.

Protection of Society and the Individual

In the second major problem area, protection of society and the individual, a balancing of possible gains and losses is required. The probable cost to society or the individual of a favorable or unfavorable parole decision must be estimated. Paroling an offender who is capable of a serious violation against persons or property represents a real risk to society. Until more knowledge is available we cannot predict with confidence that it will not occur. The best we can do is to draw on previous experience with similar cases and state the probability of violation.

The possible threat to the parole system following an act of serious parole violation is also a matter of concern to the parole board member. The publicity attending criminal acts of parolees impairs the effectiveness of the parole system in handling cases of future parolees. Suitable employers and sponsors become reluctant to accept the responsibility of supervising parolees. The entire parole system becomes the object of harassing attacks which threaten its very existence. Fears are aroused which may result in inexpedient and hasty changes being made in the way it functions. Here again the ability of the board members to prevent such an occurrence is limited by the degree of confidence with which the number of violations can be predicted and hence controlled.

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Many criticisms have been directed toward our inadequate techniques of parole supervision, lack of
sufficient and competent personnel, and failure to provide proper facilities for bringing about the parolee's
readjustment to society. Parole board members should
thoroughly understand the specific limitations of parole
supervision within their own jurisdiction. This will make
it possible to avoid paroling inmates whose problems
cannot be handled properly. To expect too much from
parole supervision is as wrong as to assume that it does
not help at all. An accounting of the probable obstacles
to successful parole adjustment will permit the most discerning use of available supervisory facilities. Furthermore it permits selection of persons most likely to succeed
under present conditions.

There is no way to estimate the full cost to society and to the parole system which may result from serious parole violation. The cost of crime involves many values which we cannot appraise in dollars and cents. On the other hand, the parole system is often supported by the argument that maintaining a man on parole costs much less than maintaining him in prison. Even this argument does not allow for the additional gains to society which result from the productive labors of the parolee outside, rather than inside, prison walls. The contribution which the adjusted parolee makes on the job, in the home, and in the community cannot be evaluated in terms of money. Failure to grant parole to a meritorious case is likely to result in destroying the inmate's initiative and desire for rehabilitation, a cost that cannot be measured. The harmful effect of prolonged imprisonment is well known to correctional authorities: the inmate is increasingly less capable of making a satisfactory adjustment in the outside community.

The parole board member is thus faced with many intangibles in evaluating the possible consequences of his decision both to society and to the individual and should be able to draw on the most considered professional opinion for guidance.

Readiness for Parole

The third major problem area consists in assessing the offender's readiness for parole. Careful observers have noted that offenders eventually reach a stage in their imprisonment when their chances of making a successful parole appear to be at a peak. At such times the prisoner's attitude toward parole, his effort toward rehabilitation, and the nature of his parole situation can combine to form the most favorable outlook possible for him. A parole denial at this point often means by-passing the best chance he may have for a successful adjustment. The great difficulty lies in determining just when the peak has been reached. There is no simple way of making this decision. The best that can be done is to study the relevant factors in the adjustment of the individual to society, carefully noting the possibilities and chances for further improvement. It means studying past and present performance and predicting the future.

There appear to be two major areas which are subject to change in this connection. The first involves an evaluation of the offender's attitudes and efforts toward rehabilitation. Beginning with the early stages of detection and arrest, the offender passes through experiences which may completely change his conception of himself and his relations with other people. Sometimes the machinery of criminal justice is ill adapted to meet his needs, and feelings of resentment may be aroused. The piling up of mistakes in the correctional process often destroys the last

spark of interest in "making good" when released. In a sense the offender acquires an incapacity to benefit from further treatment until a careful analysis of his case discloses the basis of his resentment and efforts are made to remove the obstacles to his rehabilitation. Sometimes his experiences prior to imprisonment have molded attitudes unfavorable to the acceptance of conventional patterns of behavior. Within the prison the fault may lie in the associations he has made. In any case his attitudes toward authority and toward criminal behavior must be explored at the time he is being considered for parole. Indications of his interest in constructive channels of activity must be uncovered. The extent of his difficulty in making a good adjustment in prison provides a clue to his attitudes but is not always a good indication of his ability to adjust in the outside community. This evaluation of the offender's attitudes and efforts toward rehabilitation presupposes much more information than is usually contained in the reports on which the parole board must base its decision.

The other major area to be considered in determining the offender's readiness for parole involves an evaluation of his placement in the community. Knowledge of his past associations, the character of his family relationships, and the nature of his previous employment and residence is important. In what fashion does his future situation differ from, or remain similar to, the past? What is the likelihood of his renewing previous undesirable associations? Is his proposed parole job consistent with his experience, ability, and interest? Which, if any, of the disturbing elements in his family relationships have been eliminated during his imprisonment? Since the nature of the community placement is so important to successful adjustment, the parole board is unprepared to make an

effective decision unless adequate information about these factors is available.

Professional Aids to the Parole Board

The foregoing discussion of the major problem areas involved in the parole decision should serve to point out the many serious questions which confront the parole board. It is clear that its members must use every resource to increase the soundness of their decisions. The social sciences have developed much knowledge and experience in securing the kind of information which the parole board needs. Though the responsibility of reviewing all the available information in the light of various ethical principles and considerations pertaining to the protection of the public interest rests on the board, there is much to be gained by examining in detail how social scientists can assist parole authorities.

Protection Through Rehabilitation

The relative emphasis on imprisonment as punishment, or as a means of rehabilitating the offender, will continue to vary with the private opinions of parole board members. These opinions will reflect the ethics of the members and the climate of public opinion of which they are a part. An expression of policy of the board as a whole, however, with respect to these conflicting philosophies, is of value. If this group publicly gives greater weight to rehabilitation, it will tend to clarify the conflict between a punitive and reformative system of correction. To identify which of the opposing views is held by the parole board, press, or public is not usually difficult. When parole is regarded as an expression of leniency, the idea of punishment is dominant. When it is seen as a means of

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helping the offender to adjust in his home community, the idea of rehabilitation is dominant. Students of crime have abandoned the goal of punishment in favor of teaching acceptable ways of living. Their studies of penal methods and the parole system have led them to proclaim rehabilitation as the proper goal of custody and the best way of protecting the public.

Evaluating the Risk of Parole Decisions

The parole board's job is made easier if it can secure a reliable indication of the probabilities of violation for different classes of offenders. Predictions as to the probable outcome of parole can be made on the basis of prediction tables devised by sociologists. These tables also provide a basis for predicting whether violations will take the form of a new offense or only a technical violation of the parole agreement. The clinical sociologist and the psychiatrist have furnished prognoses of parole outcome through analyses of the unique organization of factors in the personality and background of inmates. By carefully evaluating the results of the prediction table and these clinical examinations, the parole board may arrive at a more objective judgment as to the probable outcome of parole and the kind of violation likely to occur. If there is continuing research to improve the accuracy of these scientific predictions, the results can become ever more useful in parole decisions.

Deciding When to Parole

The close contact of the professional staff of the prison with the offender can furnish indispensable information to the parole authority concerning his readiness for parole. Since personality and behavior problems are

consideration, it is in a favorable position at the time of the parole hearing to provide accurate reports on the prison adjustment of most of the offenders. In the course of pre-parole investigations the staff can make evaluations of the changes in interests and attitudes which the offender may have undergone during confinement. It represents the logical channel for information relative to his efforts toward rehabilitation, his relations with other prisoners and prison authorities, and the effects of these associations on his behavior and outlook.

Much of the information concerning the suitability of the parole situation should be secured in the pre-parole interview by the sociologist. Additional evidence, however, should come from actual field investigations of the community, home, family relationships, employment, and possible associates.

Analysis of the chances for further improvement in the various factors that make for "readiness for parole" can be included in the professional reports. This involves considerable judgment, however, and must now depend in large measure on professional insights. The possibility of providing more objective grounds for such judgment should not be overlooked. It seems quite feasible that a prediction table could be developed which would provide a summarizing measure of readiness for parole. Such a table could be based on factors which reflect institutional adjustment, inmate attitudes, parole conditions, and evaluations and ratings by professional and administrative staff members. It could also be designed to reveal changes in these factors. In the absence of such a device, however, we must continue to rely on the completeness of the information gathered by the professional staff for estimating readiness for parole.

THE GOAL OF PAROLE PREDICTION METHODS

If it were possible to predict with complete accuracy the outcome of parole in every case, the problem of parole selection would be much simplified. Such a situation, however, is most unlikely. Social scientists studying the prediction of human behavior are not so unrealistic. They strive simply to reduce the errors of prediction and selection to a point where they can be absorbed without disrupting the usefulness of the system. In parole prediction the goal is to increase the number of paroles granted to offenders who are likely to succeed on parole and correspondingly to reduce the number granted to those who are likely to fail. As this is accomplished, violations will not adversely affect the parole possibilities of future applicants.

Promising results have already been achieved in this direction. Predictions of further criminality are now being made by psychiatrists and clinical sociologists. These predictions are based on the detailed study of individual cases. The accuracy of these predictions has only been partially tested but seems to vary with the insight and ability of the individual clinician. The advantage of this type of prediction lies in the freedom of the investigator to single out those dominant traits, or groups of traits, in the individual case which can be expected to lead to further crime. The relations of traits and the manner in which one trait will offset another can also be taken into account. However, the principal difficulty so far has been the failure to study systematically the relation of various groups of traits to further criminality. The clinician is usually dependent on his own knowledge or experience in which a particular case appears similar to one he has read about or seen.

In an effort to provide a more objective basis for prediction, sociologists have developed parole prediction tables similar in construction to the life experience tables used in establishing insurance rates. This method involves getting information in each case on a series of factors closely related to parole success or failure. The factors are scored and predictions are made on the basis of the score. Results have been encouraging and research has constantly improved the predictive accuracy of these tables. However, few attempts will be made to utilize them until it is more generally understood how they are made, what they are capable of doing, how successful they have been, and how they can be applied routinely. The remaining chapters of this monograph will attempt to treat these questions.

¹ See pp. 69-70.

3. A Measure of Parole Outcome

The parole prediction table has meaning only if a true picture is obtained of the measure of outcome the table seeks to predict. Several alternative measures of parole outcome have been suggested for use in prediction work. A brief consideration of their merits and the problems they pose will help show the importance of the measure of outcome in a prediction system.

Total Adjustment

The ideal measure of parole success or failure would reflect the relative adjustment of the parolee in all the various spheres of his social activity, such as family life, employment, leisure-time pursuits, and so on. This knowledge, however, would be difficult to secure and use routinely. Much time and funds and also many trained persons would be required to make the necessary follow-up investigations. In some of the larger states having well-organized systems of parole supervision, the investigations and reports made by parole agents could, perhaps, be expanded so as to include the required information. But in most states there is a discouraging lack of uniformity in such reports. They vary in the accuracy of agents' judgments and in the amount of data included. Some reports reflect a greater number of contacts with parolees than others and there is a general lack of agreement as to what constitutes adjustment.

The possibility, however, that parole agents' reports could provide the most practical source for measuring parole outcome should not be overlooked. The interest of parole prediction in developing an adequate measure of parole outcome could easily be coordinated with the need in parole supervision for developing a uniform, accurate, and complete system of reporting by parole agents.

Continued Criminality

A measure of parole success or failure that has been effectively used in a series of prediction studies by Sheldon and Eleanor Glueck¹ is based on the presence or absence of further criminal acts of the parolee. This measure requires intensive follow-up investigation of parolees in order to detect not only the criminal acts known to the officials but also those that have occurred without official detection. The experience of the Gluecks in using this measure of outcome is instructive. They were able to establish confidential contacts with a number of former parolees who frankly revealed delinquent acts not officially recorded. Occasionally the acts were simple misdemeanors known to the authorities which were overlooked in the interest of giving the parolee another chance to make good. Despite the intensive character of these investigations, it is still quite unlikely that the full extent of further criminality was revealed.

The Gluecks were also interested in the post-parole period, and here they found even greater difficulty in getting an accurate report of continued criminality. Ow-

¹500 Criminal Careers (1930), One Thousand Juvenile Delinquents (1934), Five Hundred Delinquent Women (1934), Later Criminal Careers (1937), Juvenile Delinquents Grown Up (1940), Criminal Careers in Retrospect (1943), After-Conduct of Discharged Offenders (1945), Unraveling Juvenile Delinquency (1950). See also Selected Bibliography, p. 131.

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ing to the lack of an adequate central clearing system, criminal acts occurring in other states were often not known to the state granting parole. Recently the efforts of the Federal Bureau of Investigation have helped to solve this problem. Since this clearance, however, is based on the completeness of fingerprint reports submitted by local jurisdictions, a substantial portion of officially known delinquent acts are believed to remain undisclosed.

An accurate measure of further criminality during the parole period like that used by the Gluecks would be very useful for parole prediction. Such a measure, however, would be very difficult to secure for routine prediction work. In order to obtain admissions of undetected criminal acts from parolees after the parole period was completed, highly trained persons would be needed and the cost of carrying out this follow-up work on a routine basis would be considerable.

Parole Violation Warrants

The most widely used measure of success or failure on parole has been the issuance or nonissuance of a parole violation warrant. From a functional point of view it has some disadvantages as a measure of the actual adjustment of the parolee. Warrants are generally requested and issued only when other attempts to discipline and guide the parolee toward a good adjustment have failed. For this reason many men may succeed in stumbling through their parole period, to the point of receiving a discharge, without having shown any real capacity for making an adequate social adjustment. Parole agents often overlook minor infractions of the parole agreements if they feel there is a possibility that the parolee may become stable and lead a conventional life. Thus even where good super-

vision exists, with parole agents using every personal skill and resource of the community to help the parolee to adjust satisfactorily, parole violation warrants as a measure of outcome will tend to overestimate the actual adjustment achieved. In areas of poor supervision, of course, where very little is actually known about what the parolee does, the tendency to overestimate his actual adjustment will be even more marked.

Closely related is the tendency for parole violation warrants to overestimate the absence of further criminal acts. Here, however, the relationship seems to be closer. In areas of good supervision parole agents are always alert to signs of a drift toward criminal association or activity. Violations of the parole rules, despite efforts at control, are usually associated with a return to criminal association or activity. Where the drift toward criminal associations is strong or where further criminal activity is suspected, parolees are frequently returned for technical infractions of the parole regulations. Actual proof of the occurrence of a new offense is not necessary. Undoubtedly some crimes remain undetected and many technical violators have not actually become engaged in criminal activity, but the net result is probably a fair approximation of the extent of criminal activity. In areas of poor parole supervision, parole violation warrants will, of course, underestimate the amount of criminal activity to a greater degree than in areas where supervision is adequate.

Notwithstanding the tendency to exaggerate somewhat the good adjustment and lack of criminal activity among parolees, the issuance of a parole violation warrant has many advantages. It is a clear, objective measure of success or failure which can be readily obtained from the records. After the parole period has been completed, the

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prediction worker need only check the reports to see whether or not a violation warrant was issued. If not, the parolee can be regarded as having completed a successful parole. If one was issued, the prediction worker can check further to see whether commission of a new crime or infractions of the parole rules was responsible. In the former instance the parolee would be considered a major violator of parole and in the latter a minor violator. No judgments as to the extent of parole adjustment are required from the prediction worker. The many considerations which must be taken into account in judging parole success are reflected in the decision of the parole authorities to issue a violation warrant or a successful discharge from parole.

Choice of a Routine Measure of Outcome

If each of these three alternative measures of outcome were used in a different study of prediction, the results could not be directly combined or used interchangeably. Each measure reflects slightly different facts about the parolee or the events that occurred during his parole. Consequently prediction systems based on these different measures would not predict the same event. The important problem in parole prediction work is to decide which measure would prove most practical for regular use in a correctional system.

Much confusion regarding parole prediction work can be avoided if the effect of using the issuance or nonissuance of a violation warrant as a measure of outcome is thoroughly understood. Parole officers request the issuance of warrants for a variety of reasons. There may be evidence that the parolee has committed a crime. His behavior may indicate a drift back to association with other criminals, which leads the parole officer to suspect

further offenses or the likelihood of criminal activity. The parolee may show rebellious behavior, mental deviations, or physical defects which, it is felt, the prison facilities are best able to correct. Parole violation warrants thus point clearly to cases regarded as troublesome from the standpoint of the parole officials. Any prediction system, therefore, that uses the issuance or nonissuance of parole violation warrants as a measure of outcome of parole is designed to choose the cases that will be official "trouble cases" during the parole period.

Illinois has the distinction of being the only state in this country in which a routine system of parole prediction has been established. Since 1933 a sociologist-actuary at each of the major penal institutions has carried on research in the field of parole prediction and selection and prepared routine prediction reports for the parole board. The issuance or nonissuance of a parole violation warrant has been successfully used in this work as a measure of parole success or failure. In the light of this experience the following discussion of the organization of a parole prediction system will use violation warrants as the measure of parole outcome.

¹ The parole-granting authority in Illinois is officially designated as the Division of Correction.

4. Selection of Predictive Factors

In order to predict parole outcome we need reliable information which will help to separate the offenders with a high probability of success on parole from those with a high probability of failure. Some facts about parolees will point strongly in the direction of a successful outcome and others toward failure. The facts which reflect most clearly the actual influences at work in the parole situation will also provide the sharpest separation of the two outcome groups. The difficulty, however, is that we do not know exactly what the influences or causes of violation are.

In the physical sciences it has often proved possible to control the factors at work in a situation and to determine their effect in causing a given event. Through the accumulation of such knowledge, prediction has achieved a high degree of accuracy. In the social sciences, however, control of factors is very difficult to establish. The situation is usually a highly complex one in which the interaction of many uncontrolled factors operates to produce a particular event. This is the problem that confronts us in studying behavior on parole.

Laying the Groundwork

For many years criminologists have sought to isolate the conditions and influences associated with criminal behavior. In the course of their study a fund of knowledge has been gained about the relations between personality, social and cultural experiences, and crime. These experiences are now regarded as responsible for the way in which the criminal, as contrasted with the conventional person, views himself, the social world, and his place and relation to that world. The prediction worker must seek objective measures of these special definitions of self and the social world held by the offender as a basis for prediction. The most useful prediction factors have generally been secured when the search has been closely guided by the theories and results of previous criminological research, which has featured the part played by early family experiences, contacts with delinquent associates, and repeated handling by correctional agencies.

It must be remembered, however, that parole prediction is concerned with a special kind of criminal activity, the violation of parole. Parolees are returned to prison not only for new acts of crime but also for technical violations of the parole agreements. In this connection the search for good predictive factors can profit greatly by making use of the observations and insights gained by parole agents in their routine contact with parolees. This knowledge relates directly to the special stresses and strains experienced by the parolee as he tries to make a satisfactory community adjustment. Thus in addition to selecting factors which reflect the theoretical and factual results of research on all types of criminal behavior, it is necessary to choose factors that relate to particular experiences in the parole situation.

The search for good predictive factors therefore must be continuous. As our theories of crime become more precise, as research knowledge accumulates, and as understanding of the influences at work in the parole situation increases, new factors may emerge which will improve the accuracy of predictions. The greatest increases in

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predictive accuracy will undoubtedly depend on securing better factors rather than on refining the techniques and methods of prediction work.

The Best Predictive Items

Once the factors have been chosen, a series of subclasses, or items, should be set up on each factor so as to give the best possible separation between parole successes and failures. Each of these subclasses should then be defined objectively in order to rule out bias and prejudice in classifying the cases. As an illustration let us take the factor family interest.1 Parole workers have often observed the controlling and supporting effect of close family ties. Theoretical and research results have emphasized the important role of the parolee's family in easing the transition between prison life and life in the outside community. Close family relationships help the parolee feel that he is wanted and that society accepts him. His adjustment is made easier because he finds a clearly defined place for himself and a conventional role to play. The effect is to direct his activity along conventional lines and to offset feelings of being rejected, different, or set apart—as though he, an ex-convict, were on one side of an impassable barrier and the conventional person on the other. These beneficial effects are greatest in instances where the family has maintained an active interest and given much-needed support and encouragement to the offender during his imprisonment.

The extent of family interest in the imprisoned offender has been found to be a good index of the effect of close family ties in the parole situation, and bears a significant relation to parole outcome. The prediction table now being used in Illinois breaks this factor down into five

¹ For complete definitions of the subclasses of this factor see Appendix F.

subclasses as follows: very active, active, sustained, passive, none. Parolees are classified according to objective criteria, namely, the number of letters and visits received in prison. For example, those classified as having very active family interest receive five or more letters each month from relatives, and each visit from the family is arbitrarily considered the equivalent of two letters. The classification none is given to offenders receiving no letters or visits from relatives. No restrictions are placed by prison officials on the number of letters received but visits are limited to one every two weeks except under special circumstances.

The next step in the selection of prediction items is to secure a violation rate for each of the subclasses, which is obtained by dividing the number of violators by the total number of persons in each subclass. Violation rates give the first clue as to the relative value of each item in separating the failures from the successes. In the current Illinois prediction table the subclasses of the factor family interest show the following range in violation rates:

f	Per cent
Very active	5
Active	24
Sustained	31
Passive	33
None	40

For the 4,941 parolees on whom this table was based, the violation rate was 28 per cent. Persons classified as having a very active family interest violated less frequently than the group as a whole, while those classified in the category none violated more frequently.

By applying a series of tests the value of the subclasses as selection items can be more accurately determined. These tests involve the standard statistical measures of

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significance, association, reliability, and stability.1 The object of the tests is to make sure that the violation rate of the subclass is not just a chance variation from the average rate but that it shows a significant difference; that it varies sufficiently from the average violation rate to show a high association with parole outcome; that the classification of parolees into a subclass can be made repeatedly, and hence reliably, with only slight error; and that the favorable or unfavorable character of the subclass, as shown by the violation rate, remains consistently the same over several time periods, indicating marked stability. In applying these tests to the family interest factor it was discovered that the subclass very active could be confidently accepted as a favorable item and none as an unfavorable item. The other three subclasses, active, sustained, and passive, did not meet these tests and therefore did not distinguish between parole successes and failures well enough to be counted in the final scoring procedure.

All the factors on which data are gathered must be treated in the same manner. The final result yields a set of favorable and unfavorable subclasses of factors which can be used to classify the probable successes and failures on parole. The statistical tests and measures permit the use of the subclasses which are most significantly, reliably, and consistently related to outcome of parole and thereby ensure the maximum possible degree of confidence in the final predictions or selections.

Information covering 27 factors has been secured on parolees from the Joliet-Stateville and Menard Divisions of the Illinois State Penitentiary System² back to 1925.

¹ For a more detailed discussion of these statistical tests and measures see Appendix B.

² Parolees from the Pontiac Division are not included. Inasmuch as the prison population at Pontiac represents a distinctly younger age group, separate tables are being prepared for this Division.

TABLE 1. RATING OF PREDICTION ITEMS, JOLIET-STATEVILLE AND MENARD DIVISIONS, ILLINOIS STATE PENITENTIARY SYSTEM

	Prediction factors	Rating of items		items	Prediction factors ^a	Rating of items		
	Prediction factors ^a and items	Favor-		Un- favor- able	and items	Favor-	Neu- tral	Un- favor- able
ī.	Type of offense Homicide and assault Robbery Burglary Larceny and stolen	I	0	х	6. Social type, continued Socially maladjuste Drunkard Drug addict Sex deviant		0	X X X
	Forgery and fraud Sex offenses Miscellaneous	I	0		7. Work record Regular Irregular Casual	I	0	
,2.	Sentence All definite sentences All other sentences	I	0		Student None 8. Community		0	
3.	Type of offender First Technical first Occasional	I	0		Urban Rural Transient		0	х
	Juvenile recidivist Recidivist Habitual		0	X X	9. <i>Parole job</i> Adequate Inadequate None		0	х
4.	Home status Superior Average Inferior Broken Institution	I	0 0		None One or two Three and over	I	0	
5.	Left home Family interest Very active	I	0		Normal (no gross defects) Inadequate	I	0	
	Active Sustained Passive None		0 0	X	Unstable Egocentric Gross personality defects		0	
6.	Social type Erring citizen Marginally delinquent	I			No record 12. Psychiatric prognosis Favorable Problematic	I	0	
	"Farmer" Socially inadequate Ne'er-do-well Floater	I I	0	X	Doubtful Guarded Unfavorable No record		0 0 0 0	

^a For definitions see Appendix F.

Of the 27 factors 12 have been retained for use in the current Illinois prediction table. These 12 factors and the subclasses for each are listed in Table 1. In the remaining 15 factors there were no subclasses or items which met the rather strict statistical tests used as a basis for retaining a factor. Each subclass in Table 1 has been marked with 1, 0, or x to indicate whether it was rated as a favorable, neutral, or unfavorable predictive item. A subclass was considered neutral if it failed to measure up to the statistical standards necessary for making effective distinctions between parole successes and failures.

It can be seen from this table that the factor social type proved to be one of the most useful factors for prediction purposes.2 Eight of its ten subclasses met the statistical tests well enough to be counted in the final scoring procedure. The subclass ne'er-do-well failed to meet these tests, and sex deviant included too few cases to permit any confidence in the results. When a sample of cases on this factor was restudied a year after the first classification, there was 83 per cent agreement between the two classifications. This percentage of agreement was the lowest for any of the 12 factors and reflects the presence of a subjective element in the judgment of the investigator. Notwithstanding this fact, the percentage of agreement was quite high, and the marked ability of the subclasses to make distinctions between successes and failures offset the tendency to unreliability.

In general, this factor is designed to reflect the way the offender was, or would be, regarded by conventional society. It is assumed that people guide their actions in large part by the conceptions they have of themselves. These conceptions, in turn, reflect how they are regarded

¹ For a list of these 15 factors and their subclasses see Appendix E.

²See definitions in Appendix F.

and treated by others. Consequently the way an offender is regarded by conventional society will have both a direct and an indirect effect on the course which his behavior is likely to take. The following violation rates for the subclasses¹ of the factor *social type* give support to this observation:

	Per cent
Erring citizen	О
Marginally delinquent	3
"Farmer"	13
Socially inadequate	18
Ne'er-do-well	34
Floater	39
Socially maladjusted	41
Drunkard	44
Drug addict	48

The highest violation rate found among the subclasses of the 12 factors was for the item *inadequate* under the factor *parole job*. The violation rate for those persons classified as having an inadequate parole job prospect was 65 per cent. Parolees are so classified if at the time of the pre-parole interview it was apparent that they had only a very vague notion of parole job possibilities, or if they had made arrangements for a parole job that was inconsistent with their previous work history, ability, and social type. Although considerable subjectivity in judgment also entered into this classification, there was 90 per cent agreement between the first and second attempts to classify a sample of cases on this factor.

The Illinois experience in choosing factors on which to gather information, in defining subclasses, in classifying cases with regard to these subclasses, and in selecting the best predictive items offers some interesting results. The

¹ The subclass *sex deviant* contained too few cases to permit a reliable violation rate to be calculated.

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factors and subclasses which most clearly reflect the theoretical insights derived from research and practice furnish the best items. It is preferable to base the final prediction table only on those subclasses whose violation rates vary markedly from the average violation rate in either a favorable or an unfavorable direction, provided they also meet strict statistical standards of inclusion. Subclassifications of a factor involving some judgment on the part of the interviewer or investigator often furnish excellent predictive items, provided they are theoretically oriented to important influences in the parole situation and the basis of the judgment is fairly clearly defined.

The careful selection of predictive items is the most important step in creating a prediction table. The value of such a table for parole selection varies directly with the ability of the prediction worker to secure factors which reflect the important differences in the life experiences of parole failures as opposed to parole successes. It would be possible to predict parole outcomes perfectly if a factor could be found in which all the failures on parole fell into one subclass and all the successes on parole fell into still another. However, since human behavior does not permit accurate classification in such simple terms, it is unlikely that such a "magic key" to prediction will be found. The best that we can do is to seek those factors which separate the failures from the successes most clearly, and use the combined knowledge gained thereby as a basis for prediction.

5. The Experience Table

After the relevant predictive items have been selected in the manner described in the preceding chapter, creating a table of experience from which predictions can be made is the final step. The term *experience table* is more accurate than *prediction table*, which is commonly used, since the table is simply a device for summing up the experience acquired with past parole failures and successes. It can be used to predict probable success or failure on parole and the specific rates of violation for certain groups of parole applicants. It can also provide additional knowledge of value to a parole authority in the selection process.¹

Scoring Methods

In the course of the prediction research carried on in Illinois, a great deal of experimentation was conducted with different methods of scoring in order to combine the information provided by the various factors. It was discovered that when only the subclasses of each factor which vary most from the average violation rate are counted, highly complicated scoring and weighting procedures add little to the value of the final table. In fact, a simple combination of widely deviant favorable and unfavorable items gives more useful and stable results than can be secured by complicated weighting systems.

¹ The value of the experience table in the selection process is discussed in Chapter 6.

THE EXPERIENCE TABLE

With the types of factors currently available for use in prediction work, the simple subtraction of the unfavorable from the favorable items in each case offers good results.

As shown in Table 1 on page 52, the method of item selection now used in Illinois divides the subclasses of each factor into three groups: favorable, unfavorable, and neutral. The basis of this grouping, it will be recalled, is the degree to which the subclasses meet the statistical tests of a good predictive item, and whether the violation rate of the subclass is above or below the average violation rate. The method of scoring follows quite naturally from this grouping of subclasses. Each case is scored separately. Each parolee is given one favorable point for every favorable subclass in which he falls, one unfavorable point for every unfavorable subclass, and zero for every neutral subclass. A final score is obtained by subtracting the number of unfavorable points from the number of favorable points. For example, a parolee might fall in a favorable subclass on two of the 12 factors, in an unfavorable subclass on six of the factors, and in a neutral subclass on the remaining four factors. By subtracting unfavorable from favorable points, the final score would be -4, indicating that the parolee fell in four more unfavorable subclasses than he did in favorable ones. The neutral subclasses just drop out of the scoring picture since they have no predictive value.

Computing the Experience Table

The experience table can be constructed after all the cases have been scored. One column lists the score groups and three columns list percentages, as illustrated by the current Illinois experience table shown in Table 2. The second column gives the violation rate for each score

group, and is computed by dividing the number of violators by the total number of persons in the group. These violation rates give the percentage of persons who have violated parole within each score group and serve to indicate the violation rate that can be expected for similar score groups in the future. Only 3 per cent of the persons having from 5 to 10 favorable points violated parole, while 75 per cent having 5 and 6 unfavorable points were violators. This represents a range in violation rates

TABLE 2. EXPERIENCE TABLE FOR 4,941 PAROLEES, JOLIET-STATEVILLE AND MENARD DIVISIONS, ILLINOIS STATE PENITENTIARY SYSTEM, PAROLED 1940–1945a

Score group	Violation rates Violators per 100 cases in each score group			
	Total violators	Minor violators	Major violators	
5 to 10	3	2	I	
4	7	5	2	
3 2	10	7	3 8	
2	18	10	8	
I	19	10	9	
0	29	16	13	
— I	40	25	15	
-2	46	27	19	
-3 and -4 -5 and -6	40 46 56	34	22	
-5 and -6	75	62	13	

^a For a table showing the number of cases see Appendix G.

of 72 per cent from the most favorable score group to the most unfavorable. These violation rates are often referred to as *expectancy* rates because they are used to anticipate the violation rates for future groups of parolees making like scores. Similarly, the score groups are often called *risk* groups since the violation rates associated with each group indicate the risk of violation incurred in paroling from the different score groups.

The third column represents the percentage of minor violators in each score group. The term *minor violators*

THE EXPERIENCE TABLE

refers to the parolees for whom a warrant was issued because they seriously violated the rules and regulations of parole supervision contained in the parole agreement, or they persistently flaunted the conditions set up to control their conduct.

The fourth column lists the percentage of persons in each score group who committed major violations. The term *major violators* applies to cases in which a warrant was issued because the parolee committed a new crime.

The rates for minor violators in Table 2 are higher than the rates for major violators in each of the score groups, but this has not generally been the case. In experience tables constructed in Illinois for cases paroled in the 1920's and early 1930's, the rates for major violators were higher than the rates for minor violators in the unfavorable score groups. The consistently higher rates of minor violations, as opposed to major violations, in recent years reflect a tendency on the part of the parole authorities to be more concerned about serious or repeated infractions of the parole agreements as such. This may represent an increasing awareness that persistent violation of the parole rules is closely associated with a decreasing interest on the part of the parolee in making a conventional adjustment. It accompanies a return to criminal activity in some cases, and in others a gradual drift in that direction. To the extent that the parole authorities continue to recognize repeated breaking of the parole rules as a danger signal, the rates of minor violation will continue to exceed the rates for major violation in all the score groups. In fact, the relation between these two types of rates may be used as an index of increasingly close parole supervision. Where the rates of minor violation are considerably higher than the rates of major violation in the most unfavorable score groups,

the conclusion may safely be drawn that close supervisory attention is being given to those parolees who need it most. Thus the rates of minor and major violation can provide the parole board with an estimate of the degree of reliance which can be placed on parole supervision to prevent further criminal acts among different groups of offenders.

It is often difficult to present a clear picture of the total effect resulting from a series of statistical operations. In parole prediction work the various steps taken to prepare an experience table involve the use of statistics to select the best predictive items, to score cases, and to compute the experience table. A brief review of these techniques in nonstatistical terms may serve to give a clearer understanding of the final result.

In preparing an experience table the prediction worker starts first with a sample of paroled cases. In each instance the outcome of parole is known and background information should be available. Hence each case may be classified on a number of different factors which are regarded as being related to the outcome of parole. In the second step, by a series of statistical tests, those subclasses of the various factors which are most closely related to success and failure on parole are selected. In the third step the number of unfavorable subclasses in which a case falls is subtracted from the number of favorable subclasses and a score is assigned to each case. The score indicates whether the case had more or fewer favorable than unfavorable factors, or an equal number of each. In the fourth and final step all the men with the same score are recognized as belonging to the same score group and a violation rate is obtained for each group showing the percentage of persons who violated parole. This violation rate can then be used to indicate the expected rate of

THE EXPERIENCE TABLE

violation among future parolees who may obtain a like score.

In the Illinois study we started with a large group of 4,941 paroled cases for whom the violation rate was 28 per cent. In the final experience table we had broken this large group up into ten smaller groups with violation rates ranging from 3 to 75 per cent. The effect of using favorable subclasses, closely related to success on parole, was to pull those cases most likely to succeed out of the total group, and classify them into smaller groups, where the low violation rates of these cases would show up. Similarly, by using unfavorable subclasses closely related to failure on parole, we were able to classify these potential failures into smaller groups, in which their high violation rate would be apparent. Some cases fell into favorable subclasses on certain factors and unfavorable subclasses on others. In order to give a single score to those cases, it was necessary to subtract the favorable and unfavorable score points in each instance. Sometimes the favorable and unfavorable points tended to cancel each other. However, since we were counting only the extreme subclasses highly related either to success or failure, it was unlikely that a parolee would fall in a very favorable subclass on one factor and in a very unfavorable subclass on another.

The nature of the experience table becomes more understandable if we regard it as a set of scores which concentrate as many of the potential successes as possible among the favorable score groups and as many as possible of the potential failures among the unfavorable score groups. The resulting distribution of scores and violation rates gives a clearer picture than one can get otherwise of the probable adjustment of parole applicants on parole.

Routine Adjustment of the Experience Table

It is becoming increasingly clear that routine readjustment of an experience table is required if the table is to retain its usefulness. The experience table reflects the parole conditions which existed for a sample of parolees in a certain period. However, as time goes on changes occur in the extent of pre-release preparation in the institution, in the policies practiced by the parole board, and in the efficiency and helpfulness of parole supervision. Widespread changes also occur in the parole situation in the community, as dramatically revealed by the effects of war and economic depressions on the employment possibilities for parolees. Since these changes lead to altered problems and experiences for parolees, the rates and types of violation expected on the basis of past parole conditions no longer apply. Some method is obviously required to keep the experience table abreast of such changes.

In Illinois the tendency has been to deal with this problem by making new studies and computing new tables. The experience table shown as Table 2, for example, was recently put into use. It is based only on cases paroled from 1940 to 1945. The 4,941 cases used for the computation were regarded as a large enough sample to give reliable violation rates and at the same time to keep the parole experience as close as possible to current parole conditions. The average Illinois parole period is three years, though many parolees continue on parole up to five years. In order to allow sufficient time for all the paroled cases to terminate their parole, paroles after December 31, 1944 were not included in the table. Well over half of the cases were still on parole during the postwar period.

The research study which produced this table, however, involved considerable experimentation with different prediction methods. Information on 17,097 cases, paroled over a twenty-year period from 1925 to 1945, was placed on punched cards for tabulating purposes. Different methods of factor selection, scoring, and computing of experience tables were tried out. In each instance the tables were tested on cases paroled in a later time period in order to observe how well the results would stand up.

A very important result of this research has been the observation of a steady decline in average parole violation rates over the years studied. The rates have varied from a high of 57 per cent in 1926 to a low of 26 per cent in 1943. Quite obviously this steady decline in rates has a critical effect on the rates of violation which are predicted. For example, the average violation rate during the period from 1925 through 1935 was 44 per cent, while the average violation rate for the period 1936 through 1944 dropped to 29 per cent. Predictions based on the experience acquired in the earlier period would overestimate the violation rates in the later period. Of importance, however, is the fact that the total decrease in the over-all violation rate from the first to the second period was spread quite uniformly over the different score groups. In other words, nearly all the probabilities upon which the predictions are based decreased in like proportion.

In the course of this analysis a method was developed for routinely adjusting the experience table on an annual basis. This method makes it possible to keep the experience table adjusted with only a lag of one year behind the cases currently being paroled. Tables corrected in this fashion reflect more accurately than the kind of tables generally used any changes which might occur in

the conditions of parole. The violation rates of such tables correspond more closely to the violation rates actually incurred by parolees. They also permit the parole board to be more quickly informed of the effect of its parole decisions.

The basis for this method of routine adjustment of experience tables lies in using the number of violations occurring in the first year of the parole period to estimate the number of violations that will occur throughout the total parole period. Several trials of this method disclosed that the total-parole-period violation rates for the various score groups could be estimated with an average error of only 2 per cent. Chance alone could easily account for the small differences between the estimated and the actual violation rates. An average error of only 2 per cent in the violation rates of the experience table is of little importance as compared with the increased confidence the parole board can place in the readjusted rates, since these rates reflect a more accurate picture of the situation which currently paroled cases face on their release.1 A system for regularly recording information about paroled cases on punched cards is now being instituted in Illinois, with a view to making an annual readjustment of the Illinois experience table in accordance with the methods described above.

A Master Experience Table

There is a growing interest in a number of states in the kind of information which experience tables provide as an aid to parole selection. Some consideration, therefore, should be given to the possibility of adapting the Illinois parole prediction methods and results for use in other

¹ A more detailed account of the techniques involved in using this method may be found in Appendix D.

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jurisdictions. The desirability of having a master experience table which would be generally applicable in a large number of states is apparent. It does not appear, however, that such a table can be composed at the present time.

The possibility of such a master experience table was given extended and careful consideration in the course of research for *The Attorney General's Survey of Release Procedures.*¹ The survey revealed much variation among the different states in the composition of the prison populations, the extent of preparation of the offenders for release, the amount of information available on each parolee, the policies of parole selection and supervision, the length of the parole periods, the methods of calculating violation rates, and the general conditions faced by the paroled offender in the community. In view of these differences the survey concluded that no general experience table could be composed which would be applicable in all states.

It is interesting to note, however, that a comparison of the results obtained in Illinois with the results of the Attorney General's survey showed a close correspondence in the relation of the various factors to outcome of parole for those states where the necessary information was available. This suggests that the Illinois prediction items and experience table may be directly applicable in those few states which are quite similar to Illinois in regard to the conditions listed above. The Illinois table might be accepted as a first approximation, and gradually adapted to local conditions by methods of routine readjustment as paroled cases accumulate. However, this approach, in setting up a prediction system, is not strongly recommended since there is no way of knowing in advance just

¹ Vol. 4, Parole, op. cit.

how closely the Illinois results will correspond to the parole results in other states, and to what extent the established violation rates will actually reflect local conditions.

A more acceptable approach to setting up a prediction system, which would make maximum use of the items, techniques, and procedures developed in Illinois and afford reliable results, would involve an initial study of paroled cases in order to secure local violation rates for the various prediction items and score groups. This could be done without great difficulty by using the parole board records of previously paroled cases. Information could be gathered on factors which reflected special features of the local parole conditions, in addition to the prediction factors now used in Illinois. Its methods of item selection, scoring, and computing of the experience table could then be applied directly to these data. Its methods of routine application and readjustment could be used to build up the sample of paroled cases and to keep the table constantly adjusted to changes in the conditions of parole. Information on new factors could be gathered regularly during the course of pre-parole interviews and added to the current prediction factors as they proved their value for prediction and selection. An experience table so prepared could be relied upon to reflect the actual parole conditions and the reactions of different types of paroled offenders to these conditions.

It is quite likely that the parole board records in some states will not contain sufficient information of predictive value. The alternative, in such a situation, would be to obtain the necessary information through interviews with offenders who are granted a parole until enough data have been secured. It is estimated that the predictive items and methods used in Illinois would require at least

THE EXPERIENCE TABLE

1,000 cases to give reasonably reliable results. In states where the annual number of paroles is small the problem is somewhat complicated, since time would have to be allowed for the sample of cases to accumulate and for the outcome of the paroles to become determined. Once the basic data have been completely gathered, however, the remainder of the task could be accomplished quite rapidly in accordance with the procedures described.

6. Applying the Experience Table

Although the use of experience tables by parole authorities has been recommended on many occasions, little attention has been given to a close examination of the way in which these aids to parole selection can be employed most effectively. The chief reservation concerning their use has been based on the feeling that they might be used too mechanically, and that the merits or demerits of the individual case might not be given enough consideration. But this apprehension is based on a lack of understanding of the kind of information the experience table affords and the nature of its role in the parole-granting process.

In the early chapters of this monograph the major problem areas in the selection process were discussed and an effort was made to point out the many vital considerations which the parole decision must take into account in each of these areas. An evaluation of the risk of violation involved in the decision to grant parole is helpful to the parole board. Whether or not the risk should be taken in an individual case remains a matter of judgment on the part of the board since there are many other considerations which may be of equal or even of greater importance. Thus the fear that use of an experience table may lead to the automatic granting of parole is unfounded. The table covers only a portion of the factors entering into the parole decision, and affords a statement of violation

APPLYING THE EXPERIENCE TABLE

risk useful only in conjunction with these other considerations.

In Illinois the board properly regards violation rates as one of a number of guiding facts which permit more intelligent and informed decisions. An examination of the factors in the parole decision leads to the conclusion that no single device which social scientists may contrive can adequately supplant the mature and considered judgment of the parole board members. This judgment is on sounder ground when sociological, psychological, and psychiatric knowledge of the offender is fully used. No one of these single sources of information, however, is in a position to encompass all the implications of a case for the individual and society.

As already stated, there is a close parallel between the part played by experience tables in the parole selection process and the use of life tables in establishing insurance premiums. By giving the average life expectancy of persons classified into different groups on the basis of age, sex, physical condition, and occupation, life tables permit distribution of insurance applicants into different risk groups where the required premium appropriately offsets the risk being taken. This provides very important and reliable information but it is not used in a narrow, mechanical fashion. The case is first reviewed by an insurance underwriter, who carefully considers the presence or absence of other factors which might alter the estimation of the risk involved. In the light of all the factors present he must balance an interest in writing a new policy with the need for protecting the company against undue risk. The information furnished by the life tables is thus simply one of several guiding facts involved in reaching the final decision. The underwriter plays an essential role since a mechanical application of

life table risks would not provide the measure of safety necessary to the successful operation of the insurance company.

The classification of violation risk on the basis of the parole experience table contributes information of similar value for reaching parole decisions. The parole table, like the insurance life table, informs but does not dictate the final decision. After considering other factors not included in the experience table, the parole board may alter the estimation of the risk involved or may accept the risk in the interests of society and the offender.

The information furnished by the parole experience table can be of considerable advantage to the parole board on two different levels: it can be used to guide the board in weighing the merits of each individual case on the parole docket and to guide parole policy. Each of these functions is treated below in detail, with particular reference to the experience acquired in Illinois.

Use of the Experience Table in Individual Cases $The\ Prediction\ Report$

In the case of each parole applicant appearing before the parole board a prediction report is prepared on the basis of an interview conducted by a sociologist-actuary prior to the hearing. This report contains a listing of the various subclasses of the prediction factors in which the offender is classified. The favorable, unfavorable, and neutral subclasses are recorded and a final score is computed for each case. This is followed by a statement of the rate of violation expected among persons having the given score, the percentage of persons in this score group who can be expected to violate their parole by seriously breaking the parole rules, and the percentage expected to violate by committing new offenses.

STATE OF ILLINOIS DIVISION OF CORRECTION

PREDICTION REPORT OF THE SOCIOLOGIST-ACTUARY

ILLINOIS STATE PENITENTIARY SYSTEM JOLIET-STATEVILLE DIVISION

Number 00000 Name B	J Docket I	May, 1942
Factor	Item	Score
1. Type of offense	Murder	1
2. Sentence	Life	1
3. Type of offender	First	1
4. Home status	Average	0
5. Family interest	Very active	1
6. Social type	Socially inadequate	1
7. Work record	Irregular	0
8. Community	Urban	0
9. Parole job	A dequate	0
10. Number of associates	Two	0
11. Personality rating	Inadequate	0
12. Psychiatric prognosis	Problematic	0
	Total score	5
This inmate is in a class in w	hich3per cent ma	v be ex-

This inmate is in a class in which _______ per cent may be expected to violate the parole agreement; ______ per cent of the persons in this class may be expected to commit serious or repeated infractions of the parole rules; and ______ per cent may be expected to commit new offenses on parole.

SAMPLE PREDICTION FACE SHEET

Joliet on May 2, 1922 from ______ County. He pleaded guilty to murder and was sentenced to life imprisonment.

State's Attorney's Report. "On the 15th day of November, 1921, the defendant in company with his associates M_____ and R____ stole an automobile after a pro-

¹ The case reported here and in the sample prediction report has been disguised as to all identifying information. The man was granted a parole in 1943, successfully completed a three-year period, and was discharged in 1946. He adjusted satisfactorily and showed no inclination to return to delinquent or criminal pursuits.

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OFFENSE: longed period of drinking in bars and

	taverns in the vicinity of
	street. The defendants proceeded to the
	home of M where a gun was pro-
	cured and then drove to the
	filling station on street. The
	station attendant C F
	was ordered to hand over the day's re-
	ceipts but instead attempted to grab the
	gun from the hand of the defendant
	M In the ensuing struggle the
	gun went off, the bullet striking the station
	attendant in the stomach. The defendants
	immediately drove off in the stolen auto-
	mobile without obtaining the cash re-
	ceipts. The station attendant C
	F died from the effects of this
	wound the following day. Prior to his
	death he identified M as his
	assailant and M implicated the
	defendants J and R
CRIMINAL	According to a check of FBI and local
RECORD:	4.
	criminal record.
INSTITUTIONAL	A check of the institutional punishment and
RECORD:	assignment records reveals that J
	has worked steadily and satisfactorily on
	the honor farm for the last fourteen years.
	He had two minor punishment reports for
	talking and disobedience in 1923 and 1928
	respectively. Since that time he has given
	no trouble to the institutional authorities.
FAMILY	B j is a forty-five-year-
BACKGROUND:	
	was born in, Illinois, of
	Irish parentage on January 12, 1898. His
	father G, who died in 1916, and
	the mother L, aged sixty-nine,
	70

5	ELECTION FOR PAROLE
FAMILY BACKGROUND:	were both born in Ireland. They met and were married in the United States in 1895. The father was an honest, hard-working man who managed to support the family by working as a construction laborer. At times when work was slack the family were hard pressed for food and clothing, but were never compelled to seek relief from the city. The home atmosphere seems to have been generally congenial, although J reports he often regarded his father as being too strict. After the father's death in 1916, the mother began to work as a cleaning woman to support the family. J also worked and states he contributed to the family support. The mother has never remarried and since J 's imprisonment has been supported largely by the contributions of her daughter and son-in-law. J 's sister E has been married since 1920 and has reared three children. The mother now resides with E and her husband at
	J still receives an average of six letters a month from his mother and sister and also receives at least one visit a month from them. In view of his long period of incarceration, the family interest has remained very active. He states he has received constant encouragement and support from his family and does not know how he could have made it without them.
MOBILITY:	Until J enlisted in the Army in 1917 he lived at home with his mother and sister. The family had lived in the same

home at ______ since shortly prior to J_____'s birth. Following his return

APPLYING THE EXPERIENCE TABLE

MOBILITY:	from service, however, J stayed at home only briefly and since 1919 had been living in a number of different rooming houses on the north side. The neighborhood in which he resided prior to this offense had very much deteriorated. The rate of delinquency is high in this area, which is characterized by numerous taverns, pool halls, gambling dens, and houses of prostitution. Prior to the present offense, J was living in a rooming house at with his associate M
EDUCATION:	J completed the tenth grade in school at before quitting in 1914, two years prior to his father's death, because, he states, he felt the family needed his support, and he was more interested in getting a job than continuing with his schooling. He appears to have adjusted reasonably well in school, however, and obtained average grades. There is some indication of truancy on a couple of occasions, but this apparently never became a problem. Psychological tests rate him as having high average intelligence.
WORK RECORD:	J has had an irregular work record. Prior to leaving school he worked as a newsboy part time and on a newspaper delivery service during the summer months. His first full-time job was as a grocery clerk in a neighborhood store for six months. He then quit to obtain a construction job with his father and remained on this job until his father's death. He decided that he could get a job with better pay and finally secured employment as a switchman for the Railroad. He apparently

WORK RECORD:

enjoyed this work and remained on this job, giving satisfactory service, until his Army enlistment in 1917. Following his return from service in 1919, he again worked for the same railroad company as a switchman but became restless after a few months and quit his job. For about five months he was unemployed and spent his time loafing about taverns and pool halls on the north side. Occasionally, he would get part-time work as a bartender, and finally became regularly employed as a bartender at ______, where he remained for about a year. He had started to gamble heavily and lived a rather hand-tomouth existence for several months until he obtained another job as a bartender at He remained there for about five months, but had been again unemployed for some thirty days prior to the present offense.

MILITARY RECORD:

J————enlisted in the Army on June 10, 1917 at —————. He appears to have done fairly well while in service, having attained the rank of corporal while overseas for a period of one year. After the termination of the war, however, he became somewhat troublesome, according to his own account, and lost his stripes as the result of being disobedient to an officer when he became intoxicated in camp. He states that he was given an honorable discharge, nevertheless, and was released from the Army on August 21, 1919.

MARITAL STATUS:

J_____ has never been married, but states he lived with a girl for about a year, from 1919 to 1920. There were no children as a result of this relationship.

APPLYING THE EXPERIENCE TABLE

PERSONAL FACTORS:

I_____ is in good physical health, and claims he has had nothing more serious than childhood diseases. He admits having had gonorrhea in 1920, but states this was cleared up by a local doctor prior to the present offense. He admits drinking rather heavily for about a year prior to the present offense. It appears that he first began drinking while in the Army and continued to go on sprees occasionally after his release from service. Some time prior to this offense he had acquired associates who enjoyed "fast living" and "went downhill fast." He attributes the present offense to becoming entangled in a web of delinquent and criminal influences. He appears to have enjoyed a comparatively wholesome and conventional early home life. His trend toward delinquent activity seems to have started during his Army career. It appears that he was incapable of handling delinquent suggestion after he left the controls of the home situation. The exciting life of his associates intrigued him. Through escaping the home responsibilities, he was able to indulge himself in excessive drinking, gambling, and association with petty thieves and prostitutes in the rooming house area in which he took residence. The present offense, involving an attempt to hold up a filling station and the murder of the attendant, completed a predictable sequence in the chain of activities in which he was engaged. He insists this was the first such attempt, and that previously he had never been able to get up sufficient courage to go along with his associates.

The long period of incarceration has had a very sobering effect on this man. He has

PERSONAL FACTORS:

matured and accepted responsibilities willingly inside the prison. There appears to be
little doubt that the prison experience has
burned out any adventurous interest in
crime as a way of life. The loyalty of his
family has made a deep impression on him,
and he appears eager to again take on the
responsibility of supporting his mother. It
is likely that these influences will have a
strong controlling effect in the future, and
that further criminal acts will be avoided.

POST-INSTITUTIONAL PLANS:

J______ plans to reside with his mother, sister, and brother-in-law at _____ until such time as he is able to acquire sufficient funds to obtain a separate place of residence for his mother and himself. He states that a job has been secured for him by his sister with the _____ Railroad Company as a switchman. His previous experience in this work was regarded as sufficient basis for his being hired on a probationary status. He feels that he is still quite capable of doing this work and looks forward to steady employment in this job.

In the event that parole is denied on the first appearance before the parole board and the offender is heard again at a later date, the content of the report may be altered. In additional appearances the offender is reclassified on the various factors and rescored. This often results in a change in score group inasmuch as his classification on such factors as family interest, parole job, personality rating, or psychiatric prognosis may have been affected by events which occurred since his last appearance. The report covering a subsequent appearance makes note of any change in score group since the last hearing and any change in the institutional and

APPLYING THE EXPERIENCE TABLE

social history or parole plans previously reported. Prediction reports covering additional appearances are briefer than the original report and are more in the nature of progress reports.

The initial prediction report as shown in the case of B______ J____ above provides material in addition to the prediction information. However, our immediate concern is with how the prediction information, based on the experience table, can be used in arriving at a parole decision. There are at least three ways in which this knowledge can be used, each of which will be considered separately.

Confidence in Selection

One of the important features of the experience table is the wide range in violation rates for the score groups from a very low rate to a high rate of violation. In an individual case the specific probability of violation gives the parole board an estimation of the degree of confidence, as regards risk of violation, which it can place in its decision to grant or deny parole. If the offender is found in a group with a low violation rate, the board can feel quite confident that he will succeed on parole. When he is classified in a score group with a high violation rate, failure on parole can be confidently expected. If he is placed in a middle score group, where the violation rate approximates the average violation rate, a further examination of his case requires evaluation of his attitude toward parole and efforts toward rehabilitation.

Effect of Ranking on Violation Rates

As a result of the wide range in violation rates for the score groups, the possibility exists of ranking the parole applicants according to the probabilities of violation in

the score groups in which they fall. For example, associates in the same offense are frequently considered for release on parole at the same time. The parole board may be reluctant to release them simultaneously for fear this might result in a drift toward further criminal activity. The first few months on parole usually present the most difficult problems of adjustment, and a return to crime may easily hinge on the presence in the neighborhood of a former associate. Boards usually prefer to stagger the release of former associates in order to permit the most likely candidate for a successful parole to establish constructive associations and to become used to the routine of conventional living. Being able to rank the former associates as to probability of violation helps a board to decide whom to release first.

Guiding the Selection Effort

Perhaps the most important contribution of the parole experience table to the individual case lies in the usefulness of the score-group violation rates to point out doubtful, as opposed to favorable, parole prospects. The scoregroup violation rate summarizes a large amount of previous experience with cases similar to the one being reviewed. There are many individual variations but the score groups are so constructed as to emphasize uniformities. The score-group violation rate may best be regarded as a kind of traffic signal. When the violation rate of the score group in which the case falls is low, it has the effect of flashing a green light to the parole board. Such a violation rate indicates that all of the previous experience with comparable cases points to probable success on parole. The parole board may feel compelled for a number of other reasons to deny parole, but the violation rate gives assurance that the experience with

APPLYING THE EXPERIENCE TABLE

similar cases has generally resulted in a favorable parole adjustment.

When the reported violation rate is high, the effect is that of flashing a red light. It signals the fact that the percentage of failures among similar cases is high. The board may be willing to risk a parole if a further examination of the case reveals the presence of favorable signs. Many factors not covered by the experience table may point to the desirability of such a decision. The important point, however, is that the board is aware of the risk involved since it has had the benefit of a reliable summarization of past experience with similar cases. Mistakes that occur will simply be errors of judgment, and will not be due to lack of information as to the potentiality of violation.

In cases falling in the middle score groups, the effect of reporting the violation rate is that of signaling caution. The cases are not distinctive enough in relation to the factors on which the experience table is based to warrant a prediction of either success or failure. Their merit must be judged largely in such terms as the nature of the crime, the offender's attitude toward parole, and his general response to treatment in the institution. Relevant information depends primarily on having a well-developed and individualized program of institutional analysis and treatment.

The organization of the experience table permits the identification and use of two critical points as a guide to the parole board. The first relates to cases in score groups where the violation rate exceeds 50 per cent. In paroling cases with an expected violation rate higher than 50 per cent, the chances are that more potential failures will be released than successes. Cases beyond this critical point therefore call for special care to reveal favorable trends

in the case record which would warrant the conclusion that the offender might succeed on parole at that time.

Research with experience tables has produced another fact which is of value to the board in this connection. The higher the average violation rate among the paroled cases on which the experience table is based, the greater will be the number of score groups with violation rates over 50 per cent. In other words, the experience table can be of greatest use to a parole board when the violation rate among the paroled cases reaches the point of threatening the integrity of the parole system. Thus the experience table furnishes the clearest distinctions between potential violators and successes when the knowledge is most needed.

The second critical point is the one at which the violation rates of the score groups are higher than the average violation rate for all the paroled cases on which the table is based. Beyond this point the chances are high that the *proportion* of violators released will exceed the *proportion* of persons released who will succeed. Paroling a disproportionate number of cases beyond this point will increase the total violation rate.

The location and significance of these two critical points may be illustrated by Table 2 on page 58. The first critical point occurs between the scores (-2) and (-3, -4). The expected violation rate is 56 per cent in the score group (-3, -4) and 75 per cent in the score group (-5, -6). In both groups paroled cases can be expected to include a larger number of failures than successes. The second critical point, on the other hand, occurs between the scores (0) and (1) because all the score groups from (0) to (-5, -6) have violation rates higher than the average violation rate of 28 per cent. Thus all cases paroled with scores of zero or less can be

APPLYING THE EXPERIENCE TABLE

expected to include a larger *proportion* of potential violators than of potential successes. In Table 2 it was found, for example, that 76 per cent of the parole failures had scores of zero or less, while only 50 per cent of the parole successes had similar scores.

These critical points should not be interpreted as restricting the board's paroling action. Rather, they should be regarded as guide points to show the need for more intensive processing of certain kinds of cases.

Use of the Experience Table to Guide Parole Policy

There are two principal ways in which the information gained from the experience table and from working with the prediction factors can be used by the parole board to guide its over-all actions and policies: (1) to retain control of the total violation rate through the selection process, and (2) to guide changes in parole selection policy with reference to different classes of offenders.

Control of Total Violation Rates

A valuable result of prediction research has been the proved ability of experience tables to predict the total violation rate of new groups of paroled cases within an average error of 1 to 2 per cent. As a consequence the parole board is able to exercise constant control over the selection process.

After the board's actions on the monthly parole docket have been declared, a prediction can be made as to the expected total violation rate among those persons granted parole. This rate can be secured by using the violation rates of the experience table to estimate the number of cases in each score group who will violate parole. The estimated number of violators in each score group can then be totaled and the resulting sum divided by the

number of persons granted parole to give the expected total violation rate. In order to obtain a sample of cases large enough to be reliable, this procedure can be carried out for all persons granted parole during the preceding twelve-month period.

This use of the experience table permits the parole board to know within 2 per cent the probable violation rate of the cases granted parole within the year. The board may then decide that an even higher risk of total violation can safely be taken and liberalize the paroles granted accordingly. On the other hand, if the risk of violation is high, the members may be concerned about the probable violation rate and exercise greater caution in the processing of cases. Whatever the situation may prove to be, this use of the experience table permits the parole board to establish a more informed control over their actions in accordance with established standards or policies.

Adjusting the Standards of Selection

For a number of years in the field of parole, increasing emphasis has been placed on the need for flexible standards of parole selection which will take account of individual needs and merits. This emphasis on the individual case, however, has been prone to neglect the fact that the very process of reaching a parole decision requires a basic fund of general knowledge regarding the factors which actually make for success or failure on parole. In the absence of research results showing the relation of certain factors and influences to the outcome of parole, the parole board member must rely on common-sense knowledge to judge the importance of these factors in parole adjustment. To help him arrive at a decision, he is likely to draw on his own personal experiences. Since

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they are limited to results observed in certain unusually striking cases, his conceptions of the importance of the various factors may not conform to the results found to be significant in paroled cases generally. Moreover they may give him a distorted picture of the actual importance of certain factors. Conceptions so formed tend to give weight to individual biases and prejudices. To the extent that this situation exists, injustice and discrimination may present a serious problem in the parole selection process.

A method for correcting this condition lies in setting up a routine and continuous program of research which will serve to provide sound factual knowledge of the relation of various factors to parole outcome. On the basis of such information parole boards can determine the importance of various factors and set sound standards and criteria for parole selection.

The routine study of factors used in experience tables represents an initial step. Consider, for example, the importance generally attached to a previous criminal record. Correctional authorities, quite properly, have long stressed the predictive power of factors based on the criminal record of offenders. The fact of a criminal record implies a great deal about offenders which is not apparent on the face of the record. It indicates a set of unique experiences which condition the offender differently from conventional persons. It suggests an exposure to influences and associations which generally lead to the development of delinquent attitudes, goals, and patterns of behavior. It implies the development of a self-conception which sets the offender apart in his interests and manner of living from conventional groups in our society.

Research carried on in Illinois, however, has shown that the predictive value of a criminal record, or of classifications based on this record, varies considerably over

the years. For example, repeated offenders (persons with three or more previous felony convictions) show violation rates decreasing as much as 55 per cent from one time period to another. The same is true of other types of offenders, though the rates for those with no previous record or only a minor record tend to show the greatest stability. This fact is of considerable importance. It means that parole authorities cannot rely on the fact of a criminal record, as indicative of possible violation, to the same extent in one time period as in another. It also means that less risk is being taken in paroling advanced offenders under the conditions existing in one time period as contrasted with another. Prediction workers can keep the parole board informed by keeping track of these rates on a routine basis. The board is then enabled to adapt its selection policies in accordance with the actual performance of various classes of offenders under varying parole conditions. It can thus achieve a more flexible parole policy, supported by accurate statements of the risk involved in releasing certain classes of offenders.

THE NEED FOR ROUTINE FOLLOW-UP

As a result of the foregoing discussion of various ways in which the experience table may provide useful information for the parole board, the importance of setting up a system of recording the results of parole for each case can be recognized. The parole board cannot place much confidence in the violation rates taken from the experience table unless assured that these rates are as up to date as possible. By a routine follow-up investigation of paroled cases and by carrying on a continuous program of research on parole problems, a prediction system can become one of the most effective and reliable aids available to the parole board in discharging its duties.

7. Professional Aids in Parole and Other Correctional Work

Experience in Illinois has shown that prediction information can play an increasingly effective part in selection proceedings. This is especially true if parole board members acquire a clear understanding of the manner in which an experience table is created and of the various ways prediction information can be used. Board members have frequently mentioned the confidence that prediction reports afford them in making selections for parole. They have found the reports of value in ranking parole applicants as to probability of violation, and in indicating the need of more intensive examination on their part of certain types of cases. The routine practice of furnishing the board with information on the expected total violation rate for recently paroled cases and detailed data on the violation rates for certain types of offenders has only lately been initiated in Illinois.

Since the setting up of a routine prediction system in Illinois in 1933, there has been a steady decline in violation rates. Because of the many factors that may have an effect in lowering violation rates, it is difficult to determine just how much of this decrease may be attributed to the use of prediction information. The changing character of parole conditions, improvements in parole supervision, and more discriminating parole selection are all reflected in decreasing violation rates. However, a detailed study in 1937 led to the conclusion that the pre-

diction information played a significant part in selecting better risks for parole, and that this improved selection was a major factor in the decline of the violation rate.¹

Further evidence of the value of experience tables can be found by testing the accuracy of prediction information. For example, the fact that the total violation rate of a new group of parolees can be predicted within an average error of 1 to 2 per cent indicates the usefulness of the knowledge gained from the experience table. In a series of experiments this method of predicting the total violation rate for new cases was considerably more accurate than any other method. Moreover, the ranking effect of the violation rates from the various score groups was repeatedly demonstrated by the high correlations found between expected and actual rates of violation for the score groups in follow-up samples. This was particularly true in the experiments where methods of readjustment of the experience table were used to keep the table up to date.

In other experiments carried on recently in Illinois, it was discovered that rather close adherence to the experience table could yield up to 36 per cent greater accuracy in making parole selections than if this information were ignored. It is thus apparent that integration of this prediction information with other knowledge available to the board can provide an appreciable increase in the percentage of successful cases selected for parole.

The Relation of Prediction to Other Professional Reports

Selection is improved when it is based on a careful consideration of the maximum amount of information obtainable on each case. There are many informational

¹ Burgess, Ernest W., "Parole and the Indeterminate Sentence," Annual Report of the Department of Public Welfare. Springfield, Illinois, 1937, pp. 674–695.

sources available to parole boards throughout the country which may provide very valuable data on factors that cannot be properly considered and weighted in the prediction procedures.

Pre-Sentence Investigation Reports

In several states pre-sentence investigations are carried out by probation officers attached to the courts, and the information secured is routinely furnished to the classification division of the prison system and to the parole board. These field studies can gather reliable information which is difficult to secure in any other way. Field investigation can furnish the board with accurate accounts of the circumstances connected with the offense, the extent and nature of the offender's involvement in previous criminal activity, and the characteristic personality traits of the offender which may have impaired his ability to make an adequate social adjustment. A field report can also afford a clearer picture of the home situation, reflecting the family interest in the offender, general character of the home environment, extent of conflict within the home, and degree of marital adjustment achieved. Contact with employers offers more opportunity to appraise accurately the amount of previous work experience and degree of adjustment on the job. Contact with neighborhood acquaintances of the offender permits an evaluation of the cultural and social opportunities which the neighborhood affords, an estimation of the standing he had in the community, and a general picture of his activities and ambitions. Valuable information can be secured in this way also concerning the general character of the offender's associates, his suggestibility to their influence, and the satisfactions he may have gained from these contacts.

A field investigation of this kind is sometimes made by parole agents working directly with the parole board. Letters of verification are often directed by members of the prison classification staff to the offender's family, friends, and previous employers. But this procedure lacks the reliability and thoroughness of an actual field investigation. Occasionally reports received from other institutions and social agencies are useful, though they generally lack up-to-date information. Their greatest value consists in filling in background material on the offender.

The importance of field investigations cannot be overstressed. The classification and prediction reports become more useful when they are based on complete and reliable information secured in the field. A program of treatment and an evaluation of progress in the institution can be made more meaningful if a sound basis of fact exists from the beginning. Without such information from the outside, reports prepared in the prison cannot be checked against the realities of the offender's life in the community. When forced to rely solely on prison reports as instruments for charting a course in the selection process, the parole board is severely handicapped. If presentence investigation reports are available and are supplemented by actual field investigation of the proposed parole situation, the board is better able to make accurate and well-informed decisions.

Classification and Progress Reports

Classification work has become an accepted part of prison procedure. It has an indispensable role to play if prison confinement is to become a stage in the rehabilitation of the offender. Competent classification work calls for careful diagnosis in each case, the preparation of in-

dividualized programs of treatment, repeated evaluation of the offender's progress, and sensitive readjustment of the program to meet his needs. The entire classification program must be guided by the objective of fully preparing the offender for a better adjustment on his release to the free community. When the staff is inadequate to deal with a large inmate population, classification too often degenerates into the simple preparation of diagnostic reports which have no guiding relation to institutional treatment, and the principal objectives, value, and meaning of classification work are lost.

Careful observation of the progress of offenders in the treatment program permits the preparation of a progress report by the classification staff which will accurately evaluate the offender's attitudes, mental ability, industry, personality traits, and capacity for conventional social adjustment. This kind of information enables the parole board to set a more appropriate parole date in terms of the offender's degree of preparation for release. The board can accept or modify predicted probabilities of violation in the light of factors which the experience table does not take into account. Psychiatric, psychological, and sociological evaluations by the classification staff offer essential and indispensable information for parole boards, provided these evaluations truly reflect careful consideration in each case of the response to a wellplanned and integrated program of treatment. When classification work fails to meet this standard, the value of the reports to the parole board diminishes accordingly.

The Prediction Report

In addition to setting forth violation rates, the prediction report includes a summary statement of criminal

and social history. By relating various factors to parole outcome, the prediction worker is able to evaluate the importance of the general complex of factors entering into a case. Furthermore by the close examination of the relationship of various factors the prediction worker can frequently direct attention to a dominant factor which may alter the probability of violation indicated by the experience table. He may also point out the likelihood of a specific problem arising in the parole situation because of the presence of a certain factor. For example, in securing information on the extent of the family interest in the offender during his imprisonment, it is often possible to judge the importance which he attaches to contact with his family. When an inmate's wife fails to maintain close contact, he frequently develops a suspicious and aggrieved picture of her behavior. This questionable attitude may create a disturbed situation after his release and lead to violation of parole. The importance of his relationship with his wife could thus outweigh other considerations of a favorable nature. Pointing out the likelihood of such problems arising enables the board to attach conditions to the parole of the offender which will permit adequate supervision while on parole.

Institutional Reports

Usually evaluations of the degree of adjustment achieved by the offender in prison are included in the material presented in the professional reports of the classification staff. However, it is also customary for the institutional officers to furnish the parole board with the offender's conduct record and his educational and/or work assignments. This procedure enables the board to form an impression of the general adjustment of the

offender in prison. Although the extent of prison adjustment is not an adequate index of the ability of many prison-wise offenders to adjust in the free community, it provides useful information when interpreted in the light of our knowledge about the kinds of adjustment to prison life made by various types of prisoners. Among criminologists it is generally recognized that the professional and more sophisticated criminal types adjust well to prison rules and regulations. On the other hand, many offenders who find it difficult to adjust to prison life retain some of the qualities most necessary to adequate adjustment in the free community.

The mail office of the institution routinely presents the board with a list of the prisoner's correspondents and the frequency with which he receives letters. A list of the visitors and the number of visits received is also useful. This information enables the board members to form an impression of the extent of family interest, and to ascertain the amount of previous interest shown by the persons who may appear before them in behalf of an offender.

A routine report by the prison physician on each parole applicant also is valuable in cases where a physical disability may affect the offender's adjustment on parole. It serves to inform the board concerning the condition of the prisoner's health and permits a consideration of this factor in relation to the plans proposed for his employment on parole.

Information on all these areas of concern—prison conduct, assignments, letters, visits, and physical health—should be routinely covered in the classification progress reports. However, direct reports from the appropriate institutional officers enable the board to get a detailed picture in the event that a special problem arises in one of these areas.

Reactions of Interested Parties

In many states it is common practice to notify the prosecuting attorney, sentencing judge, and complaining witnesses that the offender is appearing for parole consideration. The purpose is to secure their recommendations. If the response to this notification is more than perfunctory and routine opposition to parole in general, the information received can be of value to the parole board in gauging the amount of community opposition which the offender is likely to encounter. Occasionally these interested parties will shed light on the sentiment which prevailed at the trial and may reflect existing community opinion. In many cases a favorable shift in community feeling is disclosed. Under such circumstances the offender is likely to receive help and encouragement on his release.

In states where the hearings are accessible to the public, many letters and personal representations are received by the parole board in behalf of the offender. These are usually from friends, relatives, or attorneys. The wisdom of this practice has sometimes been questioned because of the feeling that sentimental and irrelevant considerations are unduly emphasized. These representations, however, occasionally direct the board's attention to factors which might otherwise be overlooked, and allow an additional opportunity to judge the amount and character of family interest.

Evaluating the Information

In view of the many informational sources open to the parole board and the large number of factors to be considered, sound decisions cannot be based on any one problem area. The board has the very difficult job of examining all of the case material in such detail as to produce a decision which will afford the maximum pro-

tection possible both to society and to the individual. There is no shorthand formula for doing this. The decisions must involve a clear understanding of all the pertinent facts of the case, an appraisal of the reliability of the various sources providing the necessary information, knowledge as to the importance of various factors in the parole situation, and an ability to weigh these considerations sensitively in the light of over-all standards and policies set by the board. To the extent that the professional reports reflect accurately the offender's past life and future possibilities, the work of the board will be more effective in promoting both the welfare of society and the individual offender.

Prediction Methods in Other Phases of Correctional Work

The most extensive development of prediction methods in correctional work has been in the field of parole and only in this field have attempts been made to apply them routinely. Extension of these methods to other phases of the correctional process has been recommended and tested on several occasions. The consensus among correctional authorities is that prediction information can be of value whenever a decision as to several alternative ways of disposing of a case is required. The various studies made concerning the applicability of prediction methods to the problems of arrest, probation, and institutional treatment have revealed the promising results that might be attained. The formal problems of applying prediction techniques and preparing an appropriate experience table offer no special obstacles.

The slow development of prediction techniques in other fields of correctional work on a routine basis has been due

¹ For references to pertinent studies in these fields see Appendix H.

to the still too vague suggestions offered as to just how these methods should be instituted. Although the investigations made have shown clearly enough that such applications of prediction methods are feasible, the number of cases studied has generally been too small to furnish the basis for a routine application of the methods in any jurisdiction. No arrangements have been reported for carrying out larger studies which would provide reliable results. Furthermore a specific analysis of the way prediction information can be most effectively used in conjunction with the sources of information now available is lacking. No proposals have been presented to address the important problem of routine adjustment of the experience tables, or of professional administration of prediction work, outside the field of parole.

From the account given in this monograph of the place of prediction methods in parole selection procedures, it is clear that the successful use of prediction information in other phases of the correctional process depends on: (1) a comprehensive initial study which will give reliable results, (2) specific proposals as to the manner in which the prediction information can be most effectively used, and (3) provisions for the professional application, routine readjustment, and research development of the experience tables. The carrying out of these tasks will be facilitated by observing the close parallel between parole prediction problems and the problems of prediction in other areas of correctional work. Persons interested in applying prediction methods more widely in correctional work will be able to draw on the experiences acquired in applying these methods in the field of parole. As prediction methods find more general use and our experience increases, the refinement of prediction factors and the increase of prediction accuracy can be expected to develop rapidly.

Appendices



A. Organization of a Routine Prediction System

Parole prediction methods can be used effectively only when a routine system of applying the experience table, preparing prediction reports for the parole board, keeping the predictions up to date, and conducting research to improve the methods becomes an accepted part of parole administration. Improvements in prediction methods will increase as the advantages and limitations of the existing methods are tested in practice. Research development of prediction methods will be stimulated by the constant effort to make experience tables more reliable, informative, and accurate. In the light of these considerations some attention may well be directed to the formal organization required to carry on a routine prediction system. The experience gained in Illinois provides support for the following suggestions on the general requirements of such a system.

Personnel

The efficient functioning of a prediction system depends on its being administered by a person adequately trained to organize work, conduct interviews, prepare reports, and carry on the research necessary to the development of prediction methods. He should have sufficient knowledge of sociology, criminology, statistics, and research methods to understand clearly how to formulate and apply the experience table, how to readjust it, and how further research can improve the techniques used. Training in these fields also permits the prediction worker to make more accurate classifications of the

various factors, in that it enables him to understand the experiences implied by a parole applicant's responses during an interview. Thus the administration and development of a routine prediction system requires the constant application of a fund of social science knowledge.

In many states persons employed in the prison classification system are well qualified to carry on prediction work. Whether the prediction system is administered within the existing classification system or set up separately will depend on the particular classification system. In some states it may be preferable to establish the prediction office as a separate unit under the immediate jurisdiction of the parole board so that the prediction office can also work as a research unit for the board. In any case close cooperation between the classification and prediction staffs is required to ensure complete and reliable information being available to the prediction worker.

If inmates are used to perform the clerical functions of the prediction office, close supervision is required to prevent them from altering reports in response to pressure from other inmates. Careful selection of inmate clerks will make it easier for the prediction worker to impress them with an understanding of the usefulness and objectives of prediction work, and to enlist their aid in preserving the confidential nature of the reports.

Interviews and Reports

Each parole applicant should be interviewed prior to the parole board hearing, and complete information obtained concerning the offender's criminal and social history, so that the prediction worker may secure a clear picture of the influences operating in his background. In addition, considerable attention should be devoted to his institutional adjustment and progress, outside contacts, and future plans. The information obtained in this interview will furnish the basis for the prediction classifications and for a social history report to the parole board. By preparing a topical outline of the general

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areas of information to be explored the interviewer will be able to secure complete coverage. The use of a questionnaire is inadvisable since it has a tendency to restrict the interview, instead of permitting a free-flowing discussion in which the unique aspects of the case may secure ready expression.

In interviews with previous parole violators an excellent opportunity is offered the prediction worker to explore the influences which lead to violation. A continuous search can be carried on for new factors which will reflect more accurately the basic differences in the experiences of parole violators and parole successes. Information on these new factors can then be secured routinely. After sufficient data have been accumulated, the new factors can be made part of the prediction device. The interview should thus be regarded not only as a source of required information on each case, but also as a source for new theoretical insights into the nature of parole violation and for new factors which will improve the accuracy and usefulness of the experience table.

Sources of Verification

Verification of the offender's story should be obtained from as many sources as possible. It can best be obtained from reports of actual field investigations, conducted either by a court probation officer at the time of sentence or by a parole agent prior to the parole hearing.

If field reports are not available, a certain amount of information on the offender's past life and his prospects for securing an adequate parole situation can be secured from letters directed to his family, friends, relatives, and former employers. The offender's criminal history can be checked against the FBI transcript of his record. The report of the state's attorney and sentencing judge may furnish information on the offense for which he has been incarcerated. A letter of inquiry directed to the armed forces concerning offenders with service experience acts as a check on the military record. Clearance of the case through a central bureau of records for social agencies

may provide information on the extent of previous contact of the social agencies with the offender or his family. Specific transcripts of agency records will usually be furnished on request. Institutions to which the offender has been previously committed are generally able to supply transcripts of the classification report and institutional history. Many such requests for information may already have been made by the classification division of the prison. To avoid duplication of work, a check should first be made of the classification file. Follow-up letters or requests for new information may then be issued where necessary.

The institution provides the prediction worker with many informational sources regarding the official facts of the offender's adjustment in prison. The record office maintains a file on each offender, including all official correspondence and actions taken. From this source the prediction worker can obtain information which will clear up doubtful aspects of a case from an official standpoint. The bureau of identification can furnish a copy of the offender's criminal record. Disciplinary and assignment officers of the prison maintain records which provide an official statement of the various changes in work and cell assignments, and also of the number, nature, and reason for the various punishments. The visiting and mail office can furnish an accurate list, identifying the visitors, the number of visits, the correspondents, and the number of letters written and received. The hospital office and the prison physician can furnish medical and health records, which are important in cases where there are physical disabilities. The classification unit maintains valuable files, including sociological, psychological, and psychiatric reports of diagnoses, progress, and adjustment. In many instances the classification file will also contain information from many of the other institutional and outside sources previously mentioned. For this reason very close liaison should exist between the parole prediction worker and the members of the prison classification unit.

Records and Research

Proper organization of the prediction office necessarily involves a well-integrated record-keeping system for research needs. The type of filing system set up will vary with the kinds of information available to the research worker from other files. Assuming that the prediction work is to be organized as a separate unit, there appear to be several basic sets of records which should be maintained. These should be adapted in accordance with the unique features of the existing record system.

- 1. An informational card should be kept on each active, paroled, and discharged offender for purposes of quick identification and brief review of the official actions taken. This card can be filed by prison number and should contain the offender's number, name, offense, sentence, and date received at the institution. It should also contain the date, score, and risk group for each prediction report. The date and nature of all board actions should be indicated. The card should also contain the date of discharge from the institution, or release on parole, parole violation, return to prison, and discharge from parole, whichever dispositions apply in each case. The dates of transfer to other institutions in the prison system should also be indicated. The ready access to filing systems of other units in the prison may necessitate less detail on this card.
- 2. If a card-filing system showing current cell and work assignments of offenders still in prison is not readily available, space should be reserved for this information on the card suggested above. This information is necessary so that an inmate may be called for an interview.
- 3. A cross file arranged alphabetically for active, paroled, and discharged cases may prove advantageous, each card giving simply the name, number, and current cell and work assignment of the offender. Occasions for using an alphabetical file of this kind are limited since most of the actions on a case are transmitted under the offender's number. Consequently if other alphabetical files are fairly accessible, this file may be eliminated.

- 4. Prediction reports on each offender form the basic information and may be arranged into sections of active, paroled, and discharged cases to reduce filing errors and decrease handling. The files containing these reports, often referred to as jacket files, should contain in each case all other transcripts, records, letters, or reports received from other sources.
- 5. Where the volume of cases justifies the use of card-punching equipment, the file should include a punched card for each paroled offender. Such a system would permit the experience table to be quickly adjusted each year, in accordance with the latest results on parole outcome. Each card may be punched twice. The identifying information, necessary dates, and classifications on the prediction factors should be punched at the time of parole. Information pertaining to the outcome of parole can then be punched as the results become final. Absence of a punch in the outcome column of the card would simply mean that the offender is still on active parole. This routine punching of all pertinent information in each case permits the prediction worker to obtain statistical information on any group of parolees on short notice.

There are many problems in prediction work that require a considerable amount of further research. Care should be taken in the organization of the prediction office to permit the maximum use of the accumulated materials for research purposes. Prediction work affords an opportunity to investigate the influences which lead to parole violation, and to experiment with methods of attitude research in order to isolate some of the dynamic factors in the parole situation. Efforts in this direction can be carried on routinely as a by-product of the pre-parole interview with each parole applicant. It is becoming more and more apparent that the further advancement of prediction work and knowledge of parole demands just this kind of systematic approach. Special and limited studies cannot take the place of continuous concern with research on the part of persons who are actively engaged in the routine operation of the parole system.

B. Gathering Data and Selecting Prediction Factors

The cases included in the original sample of a new prediction instrument should be *representative* of all the various types of cases on which predictions will be made routinely after the experience table is put into use. If certain types of cases are excluded in the beginning, predictions cannot safely be made for these cases later. The following discussion illustrates briefly the problems which may arise.

If the same case has been paroled two or more times within the period covered by the original sample, should each of the paroles be included? In practice, the parole board is furnished with a new prediction of the chances of violation prior to each decision. In order, therefore, to make reliable predictions for returned violators, we would need to include all paroles of the same case in the original sample. This sample thus becomes a sample of paroles rather than parolees.

Should persons paroled to the custody of other authorities be included in the original sample? The decision to include or exclude this type of case may depend in large part on local practice. In general, if the authorities to whom the parolee is turned over wish to recommit him for a previous offense, it is best to exclude such a case. Since the basis of the decision to parole an offender to other authorities frequently differs from the ordinary case of parole to the free community, the prediction information will play little part in the parole decision. It may be considered desirable to include "turned over" cases where the parolee was wanted only for questioning, or in any event was soon released by the other authorities. The parole

period in such a case may be regarded as starting upon his release by the other authorities.

Should paroles terminated by the death of the parolee be included in the original sample? Since the probability of death is greater in some cases than others, exclusion of these cases would result in a prediction table which would fail to give reliable predictions for the kinds of cases in which this probability is high.

How long a time period should the original sample cover? The answer to this question depends on many local considerations. In order to represent adequately current parole conditions, it is important to include in the original sample cases paroled as close to the time of the study as possible. There are several important limitations on achieving this objective, however. It is necessary to include at least 1,000 cases paroled long enough before the time of study to permit the outcome of the paroles to be known. In a jurisdiction which requires fairly long parole periods, this involves going back in the records several years to reach a time when the outcomes of the cases paroled have all become final. For example, in Illinois over 95 per cent of the parolees can be expected to have completed parole within five years of the date of parole. It would therefore be necessary to start with cases paroled five years prior to the time of the study, and continue going back until a sample of at least 1,000 cases had been secured. This gives a sound foundation of cases with known outcomes. It would then be possible at a later date to add to the sample by gathering data on cases paroled up to a year prior to the time of the study. The previous sample of 1,000 or more cases provides a basis for estimating the total-parole-period violation rate for these later cases through the use of adjustment methods. In jurisdictions where the annual number of cases paroled is small, it is necessary to go several years further back for a base sample of 1,000 cases than in jurisdictions where the number paroled each year is large. Thus the time period represented by the dates of parole for the original sample will vary from

one jurisdiction to another. The limitations imposed by the length of the parole period, the annual volume of cases paroled, and the necessity for knowing parole outcome for an adequate sample of the cases make it apparent that the time period covered by the paroled cases in the original sample can be fixed only in relation to the conditions existing in a given jurisdiction.

Classifying the Cases

After the factors to be used in the prediction study have been selected and the definitions of the subclasses carefully worked out, it is desirable to check these definitions with a small sample of cases. All the problems likely to arise in classifying cases in accordance with the definitions cannot be anticipated. Unsuspected ambiguities in the definitions become apparent as the classification proceeds. Cases occur which could equally well be classified in two different subclasses of the same factor. But by carrying out a preliminary test of the classifications on a small check sample, many problems can be cleared up before beginning the main job of classifying the entire sample of cases.

In classifying the cases a research face sheet should be made out for each case. Ample space should be allowed for writing in the subclass to which the case belongs on each of the factors. Additional allowance should be made for recording such relevant items as the inmate's number, name, date of parole, date of parole termination, type of parole outcome, and the amount of time spent on parole. When the research involves special objectives in addition to prediction, the investigator may wish to include additional items of information.

After all the cases have been classified, a check on the reliability of the classifications is advisable. It can be made by taking a random sample of the cases, reclassifying them, and making out new face sheets without reference to the original classification. If the prediction worker knows in advance that the reliability of the information on which the classifications are based varies over the years studied, it may be desirable

first to arrange the cases by year of parole, and then to select a random sample of cases within each parole year. This will give a more accurate picture of the over-all reliability of the classifications and help to reveal the sources of error. The reclassification of the check sample should be carried out by a person who had no part in the original classifications. This procedure provides a good test of how readily another person, using the same definitions and case materials, can arrive at the same result.

The problem of how to evaluate reliability has received considerable treatment in the literature on parole prediction. It appears, however, that a simple statement of the percentage of full agreement in the two classifications gives the most nearly complete and meaningful information. It has been found superior to correlation, coefficient of contingency, and chi square. Occasionally the subclasses of a factor can be arranged in logical order, as for example in the factor family interest with the subclasses very active, active, sustained, passive, none. In this situation it is possible to indicate the percentage of cases in which the second classification differs from the first by one, two, or more subclasses. The method of evaluating reliability by the percentage of full agreement and the percentage of subclass deviations is particularly useful since it permits the prediction worker to see at once the subclasses which are causing the most trouble in classification.

Evaluation of reliability should, however, be carried one step further. When the selection of the best predictive items has been completed and the subclasses have been rated as favorable, unfavorable, or neutral, the prediction worker should re-evaluate the reliability data. In this re-evaluation a comparison can be made of the extent of full agreement between the first and second classifications of the subclasses of each factor. For example, the factor *social type* in the Illinois study had four favorable, four unfavorable, and two neutral subclasses, as shown in Table 1 on page 52. A parolee received one favorable point in the scoring whether he was classified in

the subclass erring citizen, marginally delinquent, farmer, or socially inadequate. Consequently shifts in classification among these subclasses would have no effect on the final score. The unreliability represented by such shifts would not have the same importance for prediction as if a classification of socially inadequate were made the first time, and a classification of drunkard, an unfavorable subclass, were made the second time. Therefore the reliability of the classifications should be reevaluated on the basis of the cases which fall in subclasses with the same favorable, neutral, or unfavorable rating on both the first and second classifications. The percentage of full agreement arrived at in this manner is generally higher and gives a more accurate picture of the actual effect which unreliability in the classifications is likely to have on the final predictions.

Selection of the Predictive Items

Before the statistical tests can be applied to select the best predictive items, it is necessary to obtain violation rates for the various subclasses of each factor. This is done by dividing the number of violators in each subclass by the total number of cases. Where a punched card has been prepared for each case, tabulating machines can be used to determine the total number of cases, violators, and successes in each subclass, and the laborious job of hand sorting and counting can be eliminated. Where the cases in a subclass are too few to permit a reliable violation rate to be computed, they may be combined with the cases in another subclass which has a similar violation rate and also appears similar from a theoretical point of view. Further combining of subclasses may be required at this point if the results indicate that the distinctions between the subclasses were originally too fine. This step can be carried out empirically in accordance with the way the violators are distributed among the various subclasses.

Several statistical tests should be considered jointly in selecting predictive items. By ranking the subclasses in accordance with their ability to meet these tests, the best available items

can be selected. The various statistical tests used in Illinois for selecting predictive items are described below.

The first test pertains to the reliability of the classifications in each subclass. The required information can be secured from the data on reliability already collected. A percentage of full agreement is secured for each subclass and two lists are prepared. One list is composed of those subclasses with violation rates higher than the average violation rate for the total sample of parolees, and the other shows the subclasses with violation rates that are lower. In each list the subclass with the highest percentage of full agreement in classification appears at the top.

The second test involves the determination of the statistical significance of each subclass. This may be accomplished by computing the significance of the difference between the subclass violation rate and the total violation rate. The resulting figure is commonly called the critical ratio of the difference between two proportions. A critical ratio over 2.58 may be regarded as indicating significance at the 1 per cent level. The labor involved in computing critical ratios in this fashion can be considerably reduced by calculating the critical ratios on the binomial probability paper developed by Mosteller and Tukey.2 This method yields approximations sufficiently close to the true values to be adequate for the purpose at hand. Two lists should then be made of the critical ratios, one list containing the subclasses with violation rates above the average violation rate, and the other containing those with rates lower than the average violation rate. In each list the subclasses should be ordered by decreasing values of the critical ratios.

The third test relates to the determination of the degree of association between the subclass and parole violation. Several

¹ Care must be taken to use the difference formula which makes allowance for the correlation term in this comparison; cf. Yule, G. Udny and M. G. Kendall, *An Introduction to the Theory of Statistics*, Charles Griffin and Co., London, 1947, pp. 361–362.

² Mosteller, Frederick and John W. Tukey, "The Uses and Usefulness of Binomial Probability Paper," *Journal of the American Statistical Association*, vol. 44, June, 1949, pp. 174–212.

measures of association are available for testing the relation of attributes, and statistical opinion is divided concerning their merits. The critical ratio discussed above is often used to indicate the extent of association, though it is properly regarded as a sampling measure. Many of the tests for association among attributes involve assumptions of normality and are sensitive to sample size. Yule's Q coefficient¹ for the measurement of the association of attributes has proved useful in the Illinois prediction studies when it is used in conjunction with a critical ratio. The measure Q is independent of the relative proportion of subclass cases in the total sample, and thus reflects association without distortion if the number of cases in the subclass is very small. When this measure is considered along with the critical ratio for the subclass, allowance can be made for the factor of sample size. By dividing the subclasses into two groups on the basis of violation rate as in the previous tests, two lists can be prepared, showing the association of the subclass with parole outcome.

The fourth test concerns a measure of the predictive efficiency of the subclass. This test indicates the improvement in efficiency of prediction which can be realized by using the distinctions afforded by the subclasses of a factor, as compared with predictions made without this knowledge. Efficient factors contribute the most to a final experience table which will permit the clearest distinctions to be made between probable parole successes and failures. The test of efficiency may be regarded as a measure of association particularly pertinent to the prediction problem, and is valuable when used in conjunction with the other tests described above. A discussion of this measure as it applies to parole prediction has been set forth in a recent article.² The net effect of applying this measure is to provide a statement of the percentage reduction

¹ Yule and Kendall, op. cit., pp. 44-45.

² Ohlin, Lloyd E. and Otis D. Duncan, "The Efficiency of Prediction in Criminology," American Journal of Sociology, vol. 54, March, 1949, pp. 441–452. A fuller description is given in The Accuracy, Efficiency and Validity of a Prediction Instrument by Albert J. Reiss, Jr. Unpublished Ph.D. dissertation, Department of Sociology, University of Chicago Libraries, 1949.

in error which the subclass contributes to the final predictions. Listing of these percentages for the two groups of subclasses, previously separated by the relation of their violation rates to the average violation rate, provides a useful test for picking out the best predictive items.

Two additional considerations enter into the selection of the best predictive items. One concerns the stability of the subclass as a good predictive item over a given period of time, and the other the closeness of the relationship between the different factors. However, a test of stability cannot be properly applied until a sufficient backlog of cases has been accumulated over a number of years. It cannot therefore operate in the initial prediction study to aid in the selection of the predictive items, but it is useful at a later date to ensure that the predictive items consistently retain their predictive power. In this connection such a test reveals the extent to which the predictive items bear a reliable and stable relationship to the outcome of parole.

The interrelationship of the various predictive items, on the other hand, is a consideration which should be taken into account from the beginning. The cost in effort of getting the intercorrelations of all the predictive items, however, is prohibitive. The best approach appears to lie in first selecting what appear to be the best predictive items in terms of the tests described above and then intercorrelating these items. Where the intercorrelations are high, it may be desirable to eliminate the items least acceptable from the standpoint of reliability, significance, association and predictive efficiency. This avoids overweighting any one aspect of the parole picture. It is recognized that the procedure described here for the selection of predictive items is a substitute for methods of weighting and scoring by multiple correlation analysis. However, until these multiple correlation methods as applied to parole prediction have been subjected to a great deal more research, this procedure will give more trustworthy results for routine use.

C. Scoring by Machine Methods

The use of card-punching equipment for statistical research work and for record-keeping is becoming increasingly widespread. Several states are now introducing punched card systems to record uniform information on offenders, so that up-to-date statistical data may be readily secured. It would undoubtedly be possible in many jurisdictions for correctional personnel to secure access to punched card machines in another state department on a part-time basis if the volume of correctional cases does not warrant full-time use. Machine methods make it possible to secure much more information with greater speed and accuracy than is attainable by hand-tabulating methods. These advantages are particularly significant in prediction work, which requires a great deal of sorting and tabulating in order to secure the necessary information after the data have been gathered.

Preparation of the Punched Cards

A punched card must be prepared for each case. Before the required information can be punched, however, the information on each face sheet must be coded. The code should be kept sufficiently detailed to meet the demands of future research efforts requiring new combinations of the data. It is advisable to consult a machine operator skilled in coding to make sure that the code is suited to rapid machine tabulation. Sparing use should be made of the columns on the card so as to allow ample space for adding data in the future as the occasion demands. The punched cards may serve as a permanent record of paroled cases and may provide a convenient source

of information that can be quickly consulted as new problems arise. As an aid in filing, a machine is available which can transcribe the punches into printed numbers and letters at the top of the card.

Since the key punch operator is likely to make errors in punching the coded information on the card, each card should be verified. As a further check, a sample of the cards can be repunched and both sets of cards compared. Since errors are also likely to be made in coding the information prior to punching, it is advisable to recode a sample of the cases. However, where the coding and punching are conscientiously carried out, the errors will be slight, with little or no effect on the final results.

Securing the Basic Tabulations

The basic tabulations on the parole outcome of the cases in the various subclasses can be secured easily by running the cards through a punched card tabulator. This machine can be so wired that it will print on a tabulation sheet the total number of cases in each subclass and the number of parolees in each subclass who fall into the various parole outcome groups—died, discharged from parole, minor violator, and major violator. From this basic information the prediction worker can compute subclass violation rates. He is then in a position to select the best predictive items and rate each subclass as favorable, neutral, or unfavorable. Once this task is completed, he can score the cases and obtain the tabulations for computing the violation rates of the experience table.

Scoring and Tabulating the Cases for the Experience Table

By hand-tabulation methods the scoring and tabulating of cases for the experience table is a laborious process, requiring several months of sorting and counting. For a sample of 5,000 cases, however, the entire process can be completed in less than a day and with much greater accuracy by using punched card

SCORING BY MACHINE METHODS

equipment. The procedure, which is not difficult, consists of the following nine major steps:

- 1. Each factor is regarded as being composed of two kinds of subclasses, favorable and other-than-favorable. The cards are sorted into two groups on one of the factors, one group containing the cases falling into a favorable subclass of the factor, and the other group representing the cases falling into an other-than-favorable subclass. The other-than-favorable group is composed of subclasses rated as neutral or unfavorable in the process of selecting the best predictive items. The cases in the favorable group may be regarded as having a score of one, and the cases in the other group a score of zero.
- 2. The next step is to take another factor and sort the group with a score of one into two groups as described above. One of the resulting groups will contain cases which fall into a favorable subclass on both of the factors for which sorts have been made. This group has a score of two. The other group will represent cases which fell into a favorable subclass on the first factor, but an other-than-favorable subclass on the second factor. This group may be regarded as still having a score of one. The same procedure of sorting should then be carried out for the group that scored zero on the first factor. One of the resulting groups will contain cases which fall into a favorable subclass on the second factor, and may be regarded as having a score of one. This group should then be placed in the same pile as the previous group, which scored only one after sorts on both factors had been completed. The group of cases which did not fall into a favorable subclass on either of the factors may still be regarded as scoring zero.
- 3. Sorting on two of the factors to be used in the experience table has resulted in three groups with a score of two, one, and zero. The same process of sorting and combining groups with like scores is continued through the remaining factors. If there are ten factors with favorable subclasses, the final result will yield eleven score groups, ranging from a score of zero to ten. A score of ten applies to cases which fall in a favorable subclass

on all ten factors. A score of zero indicates that the cases did not fall in a favorable subclass on any of the ten factors.

- 4. These scores are then punched on the cards in a spare column by running one group at a time through the gangpunch or reproducing machine. For example, all the cards in the score group eight receive a punch in the eight digit of the spare column. The cards in the score group zero can either be punched in the zero digit of the spare column, or simply left blank to save unnecessary punching.
- 5. This entire procedure must then be repeated for the unfavorable items. In this instance, however, each factor is regarded as being composed either of unfavorable subclasses or other-than-unfavorable subclasses. When the cards are sorted into two groups, one of the resulting groups will fall into an unfavorable subclass of the factor, and the other group will fall into an other-than-unfavorable subclass. One unfavorable point will be given to those falling into an unfavorable subclass and zero to those in an other-than-unfavorable subclass. Allowing for this difference in the type of division of the subclasses of each factor, the remaining procedure is identical with that carried out to secure favorable scores. For instance, if there are six factors with unfavorable subclasses, the final result will yield seven score groups, ranging from a score of six unfavorable factors to a score of zero. And the unfavorable scores may be punched in another spare column on the cards.
- 6. At this point the cards are arranged by unfavorable scores from six to zero, with the unfavorable scores punched in one column of the card and the favorable scores in another column. The next step is to take each unfavorable score group and sort the cards on the favorable score column. This will result in the cards being arranged within each unfavorable score group by favorable scores from zero to ten. The cards are now ready to be run through the tabulating machine to obtain the results by score groups.
- 7. In wiring the tabulating machine to print the necessary information it is desirable to have a breakdown of the outcome

SCORING BY MACHINE METHODS

Prediction Score		Outcome of Parole										
		One Year or Less on Parole					Over One Year on Parole					
Unfa- vorable	Fa- vorable	Died	Dis- charged	Minor Violation	Major Violation	Sub- total	Died	Dis- charged	Minor Violation	Major Violation	Sub- total	Total
0	1											
	2											
	3											
	4											
	5					· · · · · · · · · · · · · · · · · · ·						
	6											
	7						<u></u>					
	8											
	9											
	10											
1	1											
	2											
	3											
	4											
	5											
	6											
	7											
	8											
	9											
	10											
	_ 1											
6	1					-			1			
	2											
	3											
	4											
	5											
	6											
	7											
	8											
	9											
	10											

FORM USED FOR RECORDING RESULTS OF MACHINE TABULATION OF PAROLE OUTCOME BY PREDICTION SCORE OF PAROLEES

totals by time served on parole for later use in readjusting the experience table. A suggested form for this procedure is given above. The first column lists the unfavorable score points, and the second column the favorable score points. For illustrative purposes it has been assumed that there are six factors with unfavorable subclasses and ten factors with favorable subclasses. The remaining columns are reserved for the tabulation of the cases by parole outcome. It will be noted that the outcome classes appear in two sets. The totals for those who served a year or less on parole are to be recorded in the first set of out-

come columns, and the totals for those serving over a year in the second set. As noted above, this division of the data is required so that routine readjustment of the experience table may be made from these tabulations at some future date. Subtotals are provided in each set, and the total number of cases in the indicated score groups is allowed for in the final column.

- 8. After the results have been printed on the tabulator, the next step is to obtain a set of final scores and corresponding case frequencies. The final scores are secured by subtracting the number of unfavorable score points from the number of favorable score points. If there are seven unfavorable score groups and eleven favorable score groups, including the zero score group in each instance, the final score groups will range from ten favorable points to six unfavorable points. The subtraction of unfavorable from favorable scores can be entered in the left-hand margin of the form, and the totals on rows with like scores combined to give a condensed table of results for the final score groups.
- 9. The last step in preparing the experience table consists in securing the appropriate violation rates for the final score groups. It may be necessary to combine some of the score groups at each end of the distribution to ensure there being enough cases in the extreme score groups to yield reliable violation rates. The resulting experience table will then appear as illustrated in Table 2 on page 58.

The new statistical machines and larger tabulators now being produced may lessen the task involved in carrying out these operations. However, the procedure described here can readily be carried out on the older machines, which will undoubtedly be more generally available to prediction workers.

D. Routine Readjustment of the Experience Table

THE NEED is apparent for some method which will permit the prediction worker to keep the violation rates for the various score groups in the experience table more closely in line with the rates likely to arise under current parole conditions. Changes in the conditions of parole will be reflected in changing rates of violation. Consequently the accuracy of the experience table in predicting the rates of violation for paroled cases will depend in large measure on securing a sample of cases for the experience table whose date of release is close to that of the cases currently being paroled. The difficulty lies in the fact that the parole outcome for this sample of cases must be known before violation rates can be secured for the score groups in the experience table. Where the parole period may last as long as five years, the most recent cases in the experience-table sample would have been paroled five years earlier than the cases currently being considered for parole.

The Parole-Period Ratios

One possible answer to this problem was uncovered in the course of a recent Illinois research study on parole prediction. It was observed that the ratio of the total-parole-period violations in the various score groups to the violations occurring in the first year on parole changed very gradually and in general demonstrated a remarkable stability. Thus a prediction worker could obtain the number of violations occurring in the first year on parole for each of the score groups, and use a preestablished ratio to estimate the number of violations which would be likely to occur during the total parole period. Actual

experiments showed that the total-parole-period violation rates could be estimated with an average error of only 2 per cent. By using this technique the violation rates of the experience table can be reliably estimated for cases paroled up to a year prior to cases currently being paroled. It is necessary to extend the investigation of score-group violation rates far enough back into the years where the total-parole-period outcomes are fully known in order to obtain a reliable basis for the parole-period ratios to be used. In jurisdictions where the annual volume of paroled cases reaches 1,000 cases, two or three years, in which the parole outcomes are fully known, will provide a large enough sample to compute reliable ratios for the score groups.

Applying the Parole-Period Ratios

The use of parole-period ratios in computing the experience table is as follows. The ratios of total-parole-period violations to first-year-on-parole violations for the various score groups may be readily secured from the cases paroled during the years for which the parole outcomes are fully known. The number of first-year-on-parole violations for the various score groups should then be secured for all cases in the sample, including those paroled a year prior to the cases currently being considered for parole. The estimated number of total-paroleperiod violations can then be obtained for each score group by multiplying the first-year-on-parole violations by the respec-tive pre-established ratio. The estimated total-parole-period violation rates for the various score groups may be secured by dividing the estimated number of total-parole-period violations by the total number of cases paroled in each score group. The resulting violation rates provide an experience table which will furnish an accurate and reliable basis for predicting the violation rates among future paroled cases.

Readjustment of the Experience Table

In order to keep the experience table as up to date as possible, it is desirable to readjust the violation rates in the table

on an annual basis. The outcome for all paroled cases should be recorded routinely throughout the year as the information becomes available. At the end of the year this new information can then be incorporated in the experience table by eliminating from the sample those cases paroled in the earliest year and adding the cases paroled in the most recent year for which outcome data are available. The procedure described in the preceding section can then be repeated for this revised sample of cases. The resulting experience table will again be up to date and will contain cases paroled within a year of cases currently being considered for parole.

During this annual readjustment of the experience table, it will be found desirable to check the stability of the predictive items to ascertain whether they have retained their predictive accuracy and efficiency. This can be accomplished by applying the appropriate statistical tests to the cases in the sample paroled during the years for which parole outcomes are fully known. If a more up-to-date picture of the accuracy of predictive items is desired, the parole-period-ratio method, used on the cases in the score groups, can be applied to each of the subclasses of a factor. The estimated total-parole-period violation rates which are obtained for the subclasses in this fashion, however, can only be used to suggest trends in the predictive value of the subclasses. The number of cases in the subclasses will often be too small to give wholly reliable estimations. Where the number of cases is sufficiently large, this procedure will yield useful information. In other instances several annual check-ups may be required to reveal the existence of a reliable trend toward a loss or gain in the predictive accuracy of an item.

Further experience and research will undoubtedly result in more refined methods for keeping the experience table closely adjusted to the changing conditions of parole. The methods described here, however, will yield results sufficiently accurate to make routine readjustment of the experience table practicable.

E. Prediction Factors Excluded from Use in Illinois Table

Of the 27 factors analyzed in the recent Illinois research study, 15 were excluded from use in the current Illinois experience table because none of the subclasses of the factors adequately met the statistical tests imposed. The subclasses lacked a sufficient degree of association with outcome, or statistical significance, or reliability, or stability. Also where a factor was highly correlated with another factor which better met the statistical tests of inclusion, the former factor was dropped out and the latter retained. Each factor was tested several times with various combinations of the subclasses before being finally excluded. The following list gives the factors and corresponding subclasses which were excluded:

- I. TIME SERVED
 Subclasses arranged
 - Subclasses arranged by half years up to 10 years and by whole years thereafter.
- Subclasses arranged by fiveyear periods from 19 or less to 60 or over.
- Both parents American born
 Both parents foreign born
 Both parents foreign born
 Father, American born—
 Mother, foreign born—Mother,
 Father, foreign born—Mother,
 American born
 Race, Negro
 Race, white or other

- IV. CRIMINAL RECORD
 - The number of actions or commitments up to nine or over was recorded for each of the following subclasses:

Arrests and fines
Supervision, suspended sentence, probation
Jail, workhouse, state farm
Detention home, boy's school, industrial school
Reformatory
Penitentiary
Detention hospital

V. PUNISHMENT RECORD

The number of minor and major institutional punishments was recorded and finally re-

¹ For a discussion of these characteristics of predictive items and the appropriate statistical tests used to measure them, see Appendix B.

FACTORS EXCLUDED FROM USE

V. PUNISHMENT RECORD

duced to the two following subclasses:

Record of some minor or major

punishment

Record of no punishment

VI. MARITAL STATUS

Married

Married (future doubtful)

Common-law

Single

Separated

Widower

Divorced

No record

VII. WORKING AT TIME OF OFFENSE

Yes

No

No record

VIII. LAST INSTITUTIONAL ASSIGNMENT

School

Administration

Production

Maintenance

Special assignment

IX. CRIMINAL MOBILITY

Resident

Transient

No record

X. NEIGHBORHOOD AT OFFENSE

The Chicago area was divided into eleven subclasses on the basis of crime and delinquency rates. For areas other than Chicago the following classes were used:

D !

Delinquent

Hoboĥemia

Rooming house

Apartment

Immigrant

X. NEIGHBORHOOD AT OFFENSE

Residential

Rural

Institution

Circus, carnival, etc.

Negro area

Business district

Armed service

Transient

No record

XI. USE OF ALCOHOL

Abstinent

Temperate

Moderate

Intemperate

No record

XII. VENEREAL INFECTION

Gonorrhea

Syphilis

Gonorrhea and syphilis

Chancre

None

No record

XIII. PAROLE COMMUNITY

Urban

Rural

Other

XIV. PAROLE NEIGHBORHOOD

The subclasses of this factor correspond with those listed under the factor neighborhood at offense.

XV. MENTAL RATING

Very superior

Superior

High average

Average

Low average

Dull

Borderline

Mental defective

No record

F. Definitions of Factors

The current Illinois experience table is based on 12 factors. The definitions used in classifying cases on these factors are followed as closely and consistently as possible in order to utilize effectively the experience upon which the table is based. The definitions for the subcategories of each of the 12 factors are as follows:

I. TYPE OF OFFENSE

Enter the official charge for which the offender is committed. When the offender has been committed on more than one offense, enter all the offenses but score the case only on that offense which is regarded as the most serious. Generally that offense will be considered the most serious which carries the longest statutory limit as a maximum. If two different offenses carry the same statutory maximum, the one that appears to indicate the most advanced type of criminal behavior should be selected for scoring.

II. SENTENCE

Enter the sentence given the offender and in parentheses the number of concurrent or consecutive indictments for which he was committed. In the event of multiple offenses and sentences, score that sentence which corresponds to the offense scored on the first factor.

III. TYPE OF OFFENDER

- I. First: An offender who has no more serious record than arrests or fines for misdemeanors.
- 2. Technical first: An offender who has had no convictions for felonies, but may have been committed to jail, detention home, state farm, probation, workhouse, or supervision for misdemeanors.

DEFINITIONS OF FACTORS

- 3. Occasional: A person who has no more than one previous conviction for a felony, or who has been repeatedly convicted for misdemeanors.
- 4. Juvenile recidivist: A youthful offender who has had more than one period under supervision, probation, or commitment to juvenile institutions for a felonious offense.
- 5. Recidivist: An offender who has had more than one previous conviction for a felony, except where the classification habitual applies.
- 6. Habitual: An offender who has been repeatedly convicted for felonies.

It is to be understood that this classification applies at the time of the parole under consideration and refers to offenses prior to the present offense, with the following exception. If a man serves time for a new crime committed while on his first parole and is thereafter returned as a parole violator, include conviction for the intervening offense when classifying him at the time of his second parole, even though he is being paroled on his original offense.

IV. HOME STATUS

The classifications on this factor pertain to the dominant character of the offender's early home life. Careful judgment should be exercised in using the following definitions as a guide.

- 1. Superior home: A home in which there was no serious economic problem, no apparent domestic discord; and there was some evidence of religious and moral training. The parents in such cases will have been conventional, law-abiding persons, frequently active in church, social, or civic affairs.
- 2. Average home: This is a residual category between superior and inferior. It may also be used in the case where one parent dies and the remaining parent remarries, creating thereby a home unmarred by family discord or poverty but one which is not superior in character.

- 3. *Inferior home:* A home in which there was a pattern of poverty, family strife, abuse of the children, drunkenness, delinquency, etc.
- 4. Broken home: A home disrupted by separation, desertion, divorce, or death of a parent prior to the offender's sixteenth year. This classification also applies if it appears that the offender left home before sixteen years of age because it was a broken home, or the parents remarried and the remarriage was unhappy.
- 5. Left home: This category should be used where the offender left home of his own accord prior to sixteen years of age, unless the broken home classification applies.
- 6. *Institution:* This category should be used where the offender was placed in an institution, such as an orphanage, and institutional treatment represented an important part of his early life as compared to home contacts.

V. FAMILY INTEREST

The following definitions are given as guides in deciding upon the proper entry under this factor:

- 1. Very active: Inmate receives five or more letters a month from relatives.
- 2. Active: Inmate receives two to five letters a month from relatives.
- 3. Sustained: Inmate receives fewer than two letters a month, but more than one every three months.
- 4. Passive: Inmate receives letters only at rare intervals.
- 5. None: Inmate receives no letters from relatives.

The number of visits is also taken into consideration in the above classifications. One visit is arbitrarily set as the equivalent of two letters.

VI. SOCIAL TYPE

In classifying offenders according to social type careful judgment should be used; the following definitions will serve

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as guides. The classification should reflect the way in which the offender was, or would be, regarded by conventional society.

- 1. Erring citizen: An older man who has apparently been entrusted with responsibility; a substantial and reliable citizen, but one who erred on this occasion.
- 2. Marginally delinquent: A borderline classification between an erring citizen and a socially inadequate person.
- 3. Socially inadequate: An offender who has failed to establish a place for himself in conventional society, by virtue of mental deficiency, irresponsibility, or an unstable personality. He does not exhibit steadiness in his work history or responsibility in his family relationships.
- 4. "Farmer": A rural-type person who generally leads a normal social life but becomes easily involved in situations that lead to trouble.
- 5. Ne'er-do-well: An irresponsible person who seldom seeks work, lives by the easiest way possible, and is considered to have a bad reputation in the community as a thief, gambler, drunkard, etc.
- 6. Floater: A man who drifts about the country, rides freights, lives in jungles, gets tagged for vagrancy, and frequently commits minor crimes en route.
- 7. Socially maladjusted: A person who cannot adjust himself to conventional society by virtue of strong criminal orientation or serious personality disturbances.
- 8. Drunkard: An offender who continually loses his job because of drinking, frequents saloons constantly, and works only to keep drinking. Generally he has a reputation for being an alcoholic and his crime is related to his drinking.
- 9. *Drug addict:* A person who has acquired the habit of using narcotics and whose crimes are generally related to this habit.
- 10. Sex deviant: A man who engages in recognized deviant sex behavior as a common practice.

VII. WORK RECORD

This classification is a combination of (1) the proportion of a man's working life that he has been employed, and (2) the frequency with which he has changed jobs. "Working life" is here used to indicate the period of a man's life that he has been free to work; in most cases this will be the portion of his life since he finished his schooling.

- 1. Regular: A person who has worked steadily all of his working life at one or only a few jobs.
- 2. Irregular: A man who does not hold a job for any length of time, but shows fairly continuous employment. He must have held a job for one year or more in a working life of five years or more, or for six months or more in a working life of less than five years.
- 3. Casual: A man who cannot hold a job for more than a few months at a time, and who is generally discharged or quits because of his indifferent attitude toward work in general.
- 4. None: A person who has never worked at a legitimate pursuit.
- 5. Student: A person whose previous work history consists principally of school attendance, except for summer or after-school work.

VIII. COMMUNITY

This factor refers to the type of community in which the offender resided prior to the offense.

- 1. Urban: The offender resided in a city or town of more than 2,500 population.
- 2. Rural: The offender lived on a farm or in the open country.
- 3. Transient: The offender had no established residence and had been continually on the move.
- 4. Armed service: The offender resided in an Army camp or other armed service installation.
- 5. Institution: The offender resided in an institution.

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IX. PAROLE JOB

This factor should be classified on the basis of the offender's knowledge of his parole job possibilities at the time of the sociologist's interview, prior to the parole board hearing. The following definitions will serve as a guide:

- 1. Adequate: The offender has made definite contacts for a favorable job consistent with his previous work history, intelligence, and social type.
- 2. Inadequate: The offender has made only tentative parole job contacts, or has made arrangements for a job of an unfavorable nature inconsistent with his previous work history, intelligence, and social type.
- 3. *None:* The offender has made no contacts for a particular job.

X. NUMBER OF ASSOCIATES

Enter on this factor the number of persons associated with the offender on the offense for which he is serving time. Where there are several different charges, enter the largest number of associates indicated.

XI. PERSONALITY RATING

The classifications on this factor are based on the report of the mental health office of the institution. The classifications given should be scored according to the following categories, whichever is most appropriate:

- I. Normal (no gross defects)
- 2. Inadequate
- 3. Unstable
- 4. Egocentric
- 5. Some gross defect or serious personality deviation
- 6. No record

XII. PSYCHIATRIC PROGNOSIS

Record the classification on this factor as provided by the mental health office of the institution. Where no information is available, use the classification *no record*.

G. Detailed Parole Experience Table

TABLE 3. DETAILED PAROLE EXPERIENCE TABLE, JOLIET-STATEVILLE AND MENARD DIVISIONS, ILLINOIS STATE PENITENTIARY SYSTEM, 1940–1945

Score group	Total cases	Non- violators	Violators	Violation rate	Minor violators	Minor violation rate	Major violators	Major violation rate
5 to 10	120	117	3	2.5	2	1.7	I	.8
4	161	149	I 2	7.4	9	5.6	3	8.1
3	343	308	35	10.2	26	7.6	9	2.6
2	553	455	98	17.7	56	10.1	42	7.6
I	929	749	180	19.3	91	9.8	89	9.5
0	1,241	876	365	29.4	204	16.4	161	13.0
— I	940	567	373	39.6	231	24.6	142	15.0
-2	447	239	208	46.5	121	27.1	87	19.4
-3 and -4	191	85	106	55.5	64	33.5	42	22.0
-5 and -6	16	4	I 2	75.0	10	62.5	2	12.5
Total	4,941	3,549	1,392	28.2	814	16.5	578	11.7

H. Selected Bibliography

The following classified list of references is not intended to be a complete review of literature in the field of parole prediction; rather, it represents selected readings for persons interested in enlarging their acquaintance with the kind of knowledge accumulated in this field.

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ALLEN, ROBERT M. "A Review of Parole Prediction Literature," *Journal of Criminal Law and Criminology*, vol. 32, January–February, 1942, pp. 548–554.

Contains a general review of parole prediction studies with some critical comments.

Attorney General's Survey of Release Procedures. Vol. 4, Parole. U. S. Dept. of Justice, Washington, 1939.

This volume offers an excellent appraisal of parole practice and procedures in the various states and the federal government. It also reports an effort to apply prediction methods to federal parole cases and contains many pertinent critical comments on parole prediction procedures. Interesting comparisons are also presented of the relationship between background factors, selection for parole, and parole outcome for a number of states.

Monachesi, Elio D. "An Evaluation of Recent Major Efforts at Prediction," *American Sociological Review*, vol. 6, August, 1941, pp. 478–486.

A fairly complete review of prediction studies until 1941 with a number of evaluative comments.

Pigeon, Helen D. Probation and Parole in Theory and Practice: A Study Manual. National Probation Association, New York, 1942.

One of the most extensive appraisals in the literature of probation and parole from the point of view of social casework, containing numerous recommendations for improved correctional practices.

PREDICTION METHODS

Burgess, Ernest W. "Factors Determining Success or Failure on Parole," in *The Workings of the Indeterminate Sentence Law and the Parole System in Illinois* by Andrew A. Bruce and others, pp. 205–249. Illinois State Board of Parole, Springfield, 1928.

Reports the results of a pioneer prediction study on Illinois paroled cases.

GLUECK, SHELDON AND ELEANOR. 500 Criminal Careers. Alfred A. Knopf, New York, 1930.

Contains a detailed report of the initial study by the Gluecks, and presents an account of the prediction methods which they continued to use through subsequent studies.

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An excellent treatment of the major problems in prediction research with reference to the development of prediction methods in the field of marital adjustment, school success, vocational adjustment, and parole. Contains many very helpful suggestions as to prediction methods and a detailed treatment of statistical techniques in prediction.

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Report and evaluation of the problem of reliability in classification of factors for a sample of reformatory parolees.

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