This partially-annotated bibliography surveys numerous studies relating to the prediction of delinquency and parole success. This literature search was undertaken to review those studies whose results would assist the military in the selection of pre-release indicators of successful adjustment. The chosen indicators would then be used to predict the parole success of military prisoners and, therefore, aid in release determinations. An attempt was made to include the major studies, military and civilian, in the areas of parole and delinquency prediction. Studies dealing with the general problem are inserted prior to the empirical research in an attempt to first give the reader an overview of the topic. (Author)
Research Product

A PARTIALLY ANNOTATED BIBLIOGRAPHY
ON PREDICTION OF PAROLE SUCCESS
AND DELINQUENCY

by

Robert L. Byer
James H. Harris

March 1972
This material has been prepared for review by appropriate organizational or sponsor agencies, or to record research information on an interim basis.

The contents do not necessarily reflect the official opinion or policy of the Human Resources Research Organization, and their preparation does not indicate endorsement by the Organization’s contracting agencies.

The Human Resources Research Organization (HumRRO) is a nonprofit corporation established in 1969 to conduct research in the field of training and education. It was established as a continuation of The George Washington University, Human Resources Research Office. HumRRO’s general purpose is to improve human performance, particularly in organizational settings, through behavioral and social science research, development, and consultation.
A PARTIALLY-ANNOTATED BIBLIOGRAPHY
ON PREDICTION OF PAROLE SUCCESS
AND DELINQUENCY

by

Robert L. Dyer
James H. Harris

March 1972

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No. 2, HumRRO. It has not been reviewed by, nor does it necessarily
represent the official opinion or policy of the President, Human
Resources Research Organization or the Department of the Army.
FOREWORD.

This bibliography is not intended to be an exhaustive survey of all studies relating to prediction of parole or delinquency. It was undertaken to review those studies whose results would assist in the selection of prerelease indicators of successful adjustment of military prisoners. An attempt was made to include the major studies, military and civilian, in the areas of parole and delinquency prediction. Studies dealing with the general problem are inserted prior to the empirical research in an attempt to first give the reader an overview of the topic.

Work Unit RETURN was conducted at HumRRO, Division No. 2, Fort Knox, Kentucky. The Division Director is Dr. Donald F. Haggard. The Work Unit Leader during preparation of this bibliography was William C. Osborn, who was assisted by James H. Harris. SP4 Robert L. Dyer was the military research assistant. The Military Chief of the Armor HRU is LTC Willis C. Pratt.
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PART I

INTRODUCTION
INTRODUCTION

PURPOSE

Offenders and the requirements for processing them through the military justice system present a major problem for the Army. For the unit commander they are a weak point in his command since they do not perform their duties and are sources of disruptive influence. In general, they are costly in that they take up the time of line, legal, and confinement personnel; and, are wasteful of funds which must be used for apprehension, legal procedures, and confinement facilities.

The current approach to the operation of the military justice system, as indicated by the objectives of the Army Correctional Program (ACP), places emphasis on correctional treatment and maximization of the number of offenders returned to duty with potential for successful adjustment to Army life. In order to attain this end, offenders who will not, or cannot, effectively respond to correction treatment must be identified and separately processed. Effective correctional treatment programs must be developed and implemented for those identified as having potential for successful post-related adjustment.

Estimating the probability of an offender's post-release success, or the efficiency of a treatment program, is a major decision-making function. Without the aid of validated decision-making tools the commander must make this decision on the basis of personal experience and judgment and often with minimal information.

This annotated bibliography examines the method and findings of many of the major civilian and military studies in the areas of prediction of delinquency and parole success.

SCOPE OF THE PROBLEM.

The total population of the Army correctional facilities during the last 25 years has fluctuated from one-half of one percent to over two percent of all the personnel in the Army; Absent Without Leave (AWOL) is the most frequent military offense.

An example of the problems of military delinquency are emphasized in the following description of one Army post. The personnel strength for the first nine months of 1971 was slightly under 30,000. The stockade population averaged 277 men and the Personnel Correctional Facility (PCF) averaged 731 men. The PCF is used for holding men for lesser offenses or those who are awaiting trial. The AWOL rate at the stockade has averaged 4.3% while the AWOL rate at the PCF averaged 69.5%. The overall rate, excluding the stockade and the PCF, for FY 1971 was 1.83%. As can be readily seen from these figures there is a
definite need for an effective instrument to determine who will profit from PCF placement.

To emphasize the problem of delinquency in civilian life, the Department of Health, Education and Welfare (DHEW) reports that nationwide in 1968 there were 900,000 juvenile court cases involving 774,000 children. That represents 2.5% of all children in the United States up to the age of 17. Obviously, then, the early identification of potential offenders is of paramount importance in alleviating the problem of delinquency.
PART II

ANNOTATED SUMMARY OF GENERAL STUDIES IN
PREDICTION OF CIVILIAN DELINQUENCY AND PAROLE SUCCESS
To review the history and status of parole prediction.

Scope

A comprehensive analysis of parole prediction from its first advocate in 1923, Hornell Hart, through Daniel Glaser's theoretical concepts.

Discussion

One of the first to advocate predicting parole adjustment was Hornell Hart. In a 1923 paper he hypothesized an experience table of items prognostic of parole success. Burgess (1928) applied the idea to 3,000 parolees from Illinois prisons. His method involved cross-classifying cases according to (1) outcome on parole, and (2) 21 items of possible significance (such as type of offense, nationality, etc.). A parole rate was computed for each person by giving one point to each sub-classification that had a violation rate lower than the overall rate, then, violation rates could be determined for selected score intervals.

During the same time period (late 1920's), the Gluecks attempted to predict the postparole adjustment of slightly less than 500 parolees from the Massachusetts Reformatory. Their method was similar to Burgess. Parolees were scored on six to thirteen items and the items were weighted according to their capability to differentiate outcome groups.

In 1931, G.B. Vold conducted a study to assess the variability of samples and the effect of weighting factors. By randomly dividing his sample of 1,192 Minnesota parolees, he was able to illustrate empirically that score-specific violation rates differed, just as a matter of chance. Another major finding was that weighted and unweighted scores arranged parole cases from high to low approximately the same (r=.92). (Recent research has weakened this finding.)

Various later studies sought to answer specific problems in prediction:

Sanders sought to check the constancy of score-specific violation rates. He devised an experience table from 5,683 Federal parolees and applied the results to a follow-up sample of 2,838 parolees. The violation rates in the follow-up sample were quite erratic. The findings
brought to light the possibility that reliable factors in one period may be very unreliable in the almost immediate future.

Laune investigated the correlation between prediction scores and inmate personal knowledge. He solicited the opinions of inmate friends of 150 parole prospects and then correlated those with Burgess' prediction scores. There was a fair correlation (.34 r .54), but later validation revealed inmate opinions are no better than objective scores.

Jenkins (a psychiatrist) scored 221 delinquent parolee boys on 95 items, including 28 personality characteristics. He found no proof that psychiatric information improved predictive efficiency significantly over objective items.

Ohlin and Duncan proposed an "Index of Predictive Efficiency," which is defined as the percentage change in prediction error resulting from the use of an experience table instead of the overall rate. The index was applied to 22 published tables and the computed average reduction in error was found to be 16%. The low findings are due mainly to the heavy concentration of parole candidates in the middle range of score intervals where violation rates are very close to the average.

The 1928 and 1938 "Illinois Experience Tables" were revalidated by Ohlin and Hakeem respectively. The results in both cases were that the observed rates of parole violation were significantly lower than the expected rates. To meet this difficulty, Ohlin devised a method to annually adjust the experience table.

Kirby investigated the efficiency of weighting experience table items by means of the principle of least squares. His sample was 455 Federal parolees. His results indicate this method was slightly more efficient than a comparable table with arbitrary weights and about 10% more efficient than a blanket prediction based on the overall rate.

Glaser has taken a different approach than most prediction researchers. He devised his table around a theoretical concept. He hypothesized that prospective violators could be distinguished from non-violators by the degree to which they identified with criminality as a way of life. A seven-item scale scored persons on their "differential identification" with criminality. The results were somewhat superior to Ohlin's 12-factor "Illinois Experience Table," and they uphold the belief that theoretical research should be superior to merely manipulating available data.

Problem

To control delinquent behavior by identifying those individuals who will become delinquent.

Scope

Some problems of prediction devices.

Discussion

1. Many scales, including the KD Proneness Scale, the Socialization (So) scale of the California Psychological Inventory (CPI), and parts of the Minnesota Multiphasic Personality Inventory (MMPI) have had poor success when applied to young samples because young delinquents lack the reading ability and language development necessary to take the tests (e.g., Hathaway and Monachesi believed the most striking characteristics of their delinquent MMPI study was the number of delinquents who failed to answer carefully or consistently or could read well enough to take the test).

2. Validation studies involving institutionalized delinquents and an equal number of non-delinquents yield inflated estimates of predictive efficiency.

3. Many tests may only be administered or scored by trained individuals. These are not practical (e.g., the Glueck studies involved specially trained social workers and psychologists gaining subjective information from home visits).

4. The content of many tests is objectionable (e.g., the MMPI and the Glueck studies have come under criticism for invasion of privacy).

5. In applying a test, the tester must be aware of the danger of labeling children and the risk of the self-fulfilling prophecy coming true.

6. Interventions into a child's life, after he is identified as a potential delinquent, must be in response to his current needs, not as an effort to change the entire fabric of his life.

Venezia believes the most promising approach to delinquency prevention is to focus upon the young child in the school environment. Many studies point to the ability of school teachers in identifying early stages of maladjustment. Teachers obtain objective and subjective data without invading the child's privacy. Preventive intervention could be based on current needs instead of future behavior. There would be no need to label children. And, theoretically at least, dealing with current problems should reduce future maladaptive behavior -- including delinquency.

Problem

To determine the congruency or "perceptual accuracy" of the perceptions by respondents at various points in the corrections system of the importance of predictive value as empirically determined.

Subjects

Four hundred and fifteen (415) incumbents in 10 professional corrections occupations. The subjects ranged from the correctional institution custodial staff to members of citizens' councils.

Scope

Subjects were asked to assess "the relative merit or worth" of 20 items for predicting a man's success on parole. Each item was rated on a seven-point scale from very favorable to very unfavorable to parole success. Correctness of rater position response was determined by dividing the items for which empirical information was available into favorable, unfavorable, and neutral groups. The occupational positions were then rated on the basis of the percentage of positional incumbents correctly rating each item.

Results and Conclusions

Parole boards were high ranking in both optimism and accuracy (2,2).

Correctional institution staff (other) were high in optimism and medium in accuracy (5,2), as were the citizens' council members (6,1).

Judges were medium in optimism and high in accuracy (1,7).

Correctional institution treatment staff were medium in both optimism and accuracy (7,5).

Correctional institution staff custody were medium in optimism and low in accuracy (8,6), as were police chiefs (10,4).

Prosecuting attorneys were low in optimism and high in accuracy (3,10).

Parole staff was low in optimism and medium in accuracy (4,8).

Law enforcement officers were low in both optimism and accuracy (9,9).

Problem

To examine the congruency and discrepancy among parole prediction theory, general research results, and the perceptions of people in the parole process on relevant parole variables.

Subjects

Four hundred and fifteen (415) respondents representing law enforcement officers, prosecuting attorneys, Superior Court judges, correctional institution staff members, parole board members, probation and parole staff members, and a citizens council.

Scope

Twenty parole prediction variables were examined and judged to be favorable (F), unfavorable (U), and neutral (N) to successful parole in terms of theory, present research findings, and perception of corrections workers. Items were rated F, U, or N by using Glaser's (1960) modification of Sutherland's "Differential Association Theory," plus the concept of alienation, traditional beliefs associated with the legal process, and non-criminal employment.

The research results were based on 10 popular studies. The parole process workers' perceptions were rated F if (1) at least 60% of all respondents rated the item 1, 2, or 3 on a seven-item scale; (2) at least 70% of all respondents in each occupational category rated the item 1, 2, or 3; and (3) the overall model category fell within 1-2. The same process applied inversely for unfavorable items.

Results and Conclusions

The author concludes that while it is true that there has been a lag in accepting parole prediction instruments, there is congruency among theory, research, and perception of certain parole prediction items.

Perceptual accuracy seems to vary directly with education, income, self-rank, distance from the offense (or victim), and contact with parole boards or judges.

The three dimensions all agreed on 8 of the 20 items: Good employment record before incarceration (F); Sustained family interest while incarcerated (F); First offense (F); Used incarceration period constructively (F); Long delinquency record (U); Forgery (U); Frequent
alcohol usage (U); and inadequate employment while on parole (U).

The predicted success and general research results agree on five items: Left home when young (F); Homicide (F); Forcible rape (F); Other sex crimes (F); and Burglary (U).

General research and perceived success results agree on seven items: Incarcerated for more than two years (N); Committed crime with three or more accomplices (N); Negro (N); Divorced (N); Parents divorced (N); Committed crime alone (N); and Armed robbery (N).

In no case was there total disagreement.


Problem

To provide methodological techniques for increasing reliability and validity in contemporary juvenile delinquency research.

Scope

An analysis of scaling and sampling procedures, statistical techniques for purpose of measurement, the use of clinical tests, the element of bias, and the role of the researcher and clinician.

Results and Conclusions

1. The use of systematic and objective ideas for differential diagnosis in the classification of juvenile delinquency is vital, however, no single approach can be utilized and be always universally applicable to all cases.

2. Constantly stress a control-oriented approach.

3. Must differentiate between children "in need of help" and "potential delinquents."

4. Need an experimental design which will give functional validity.

5. "Social definition and self-identification are apparently large elements in the causes of some delinquents."

6. Statistical procedures should be considered as vital to present research. Preconceived notions must be avoided, as should
the rejection of seemingly contrary figures. Be extremely careful about assigning causation, for often a combination of factors, not one may be the cause. Only data that is compatible should be compared.

7. Some score differences may be caused by the following: Analysis factors, mechanical factors, administrative techniques, unclear measuring instruments, inadequate sampling of items, instructional and transient personal factors, differences in the characteristic being tested and the difference in other characteristics of the individual.

8. Scaling methodology may raise some questions: In what way was the scale validated? What techniques were used? Does the continuum have known limits? Was the test given unidimensionally? Was the position arbitrarily assigned or fixed by testing?

9. Reliability presents many questions: Did uniform training have an effect? Does the compression of the scale have an effect? What effect did dumping of the scale have? Were some values used more frequently? What effect did the number of categories have?


Problem

To discuss the current status of parole prediction as it is used throughout the United States.

Scope

An analysis of the usefulness of parole prediction tables in terms of their use by various parole boards throughout the United States.

Discussion

In 1961, a form was sent to 48 state parole boards, the New York City Parole Board, the U.S. Army, Canada, and the District of Columbia to see what parole prediction devices were in use, or had been in use. Four states were found using devices and a fifth had utilized a device in the 1950's.

Illinois adopted a program in 1928, and since 1933 a full time staff member has been at all male institutions to compute prospective parolee success rates based on the experience of past parolees with similar backgrounds.
Ohio has developed a parole prediction index from responses obtained from the Minnesota Multiphasic Personality Inventory (MMPI). This program started operation in 1961.

The California Youth Authority and Department of Corrections have an extensive program of base expectancies (see McEackern).

The Colorado Parole Board was developing prediction statistics at the time of this survey.

Minnesota had experimented with the Ohlin prediction report in the 50's, but was not using prediction tables when polled.

Evjen polled 44 professionals concerning their reactions to prediction statistics. Represented were 24 criminologists and sociologists (C); 11 parole board members (PB); 8 prison administrators (P); and 1 probation administrator (PR). Nine respondents were authors of criminology texts.

Seventy-five percent believed in the potential value of prediction statistics, while 25% questioned the value of prediction statistics.

Topical highlights of the supportive arguments included:

<table>
<thead>
<tr>
<th>Argument</th>
<th>C</th>
<th>PB</th>
<th>P</th>
<th>PR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prediction tables are a useful guide to one's own thinking.</td>
<td>15</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Prediction scores are for groups and may not fit the specific prisoner concerned.</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Prediction scales do not consider future factors.</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Prediction tables overlook subjective elements not easily measured.</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Prediction tables do not account for the impact of prison life on the parolee.</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
There seems to be a general resistance to the actuarial approach. Parole Boards do not want to feel bound by tables. There are legal restrictions; there is a stigma on the prisoner classified as a poor parole risk; and there is a general belief that more research is needed.


**Problem**

A preface to an issue of *Crime and Delinquency* devoted to prediction.

**Scope**

To identify issues of longstanding controversy on prediction.

**Discussion**

The overall conclusion is that parole professionals cannot afford to miss the advantages obtained by the judicious use of experience tables. However, the following areas of concern must be more thoroughly analyzed and researched:

1. Weighting of predictive factors or no weighting
2. Comparative importance of dynamic versus static factors
3. Evaluation of correctional process
4. Inconsistency of prediction based on different populations of parolees.
5. Need for continuous adjustment of experience tables
6. Attempts to develop an index of predictive efficiency
7. Search for most meaningful predictive factors
8. Experience tables versus the case study method


**Problem**

To discuss problems in parole prediction.
Scope

A comprehensive review of past efforts to predict parole outcome.

Discussion

A review of past efforts to predict parole outcome indicates that, although there have been some recent improvements in the methodology, there has been no appreciable increase in predictive power. Two related reasons for this are evident. First, the prevalent use of prison files as a data source limits the kind of research questions which can be asked. Second, the non-theoretical nature of this research has prevented a systematic accumulation of knowledge relative to this problem. The success of future efforts depends on whether parole prediction research conforms to the basic requirements of scientific investigation which include utilizing theoretical guidelines and selecting variables on the basis of their theoretical relevance instead of on their availability in prison files.


Problem

To offer advice to aid in evaluating prediction studies.

Scope

A critique of two studies dealing with delinquency prediction (Danielson and Clark, 1954 and Glueck and Glueck, 1950). The studies are discussed in view of the criterion of Meehl and Rosen.

Discussion

In order for a psychometric sign, pattern, or cutting score to be of practical value, it must be viewed in light of its intrinsic validity and the actual base rates. Many times when the base rates of the criterion classification deviate greatly from a 50-50 split, a test sign having moderate validity will result in greater error than simply predicting on the basis of the base rate.

The researcher must be wary in accepting validity established in small sample studies as they often do not yield accurate information concerning the test parameters. Also, great care must be used in applying information from one population to another that has the same parameters, as the new population might have a different base rate which may change the correct decisions. Formulas utilizing
Bayes' Theorem are presented for determining limits upon relations among the base rates, false negative rate, and the false positive rate.

The authors critique two studies dealing with delinquency prediction in view of their criterion. The studies critiqued are Danielson and Clark (1954), and Glueck and Glueck (1950).


**Problem**

To examine the most common technique of validation of prediction scales and some of the major problems recognized in the field of prediction of delinquency.

**Scope**

To apply data derived from a known group of delinquents and non-delinquents on a population where the delinquent-non-delinquent status is not known (e.g., Glueck and Glueck 1950). Excluding validity, three other conditions must be met:

1. The original and validation samples must be samples of the same population,

2. The social conditions must remain stable over the period of time between samples,

3. The original and validation samples must both be representative of the population.

**Discussion**

Ward believes that much of the argument concerning the efficiency of prediction scales could be eliminated if the Mannheim and Wilkins (1955) definition of efficiency was adopted. He thinks validation studies should be restricted to demonstrating the existence of a significant positive correlation between a previously established prediction scale and delinquency in an independent random sample.

Reducing delinquency is the final aim and this depends more on increasing the efficiency of treatment techniques; rather than on increasing scale efficiencies. Ward suggests testing the individual approach in preventing delinquency versus the community service approach against a no-treatment control group. The decision of effectiveness should be made in terms of decrease in rate of delinquency per dollar.
Problem

To use various typologies to analyze the results of parolees from an Illinois penitentiary between 1940-1949.

Scope

The typologies used were:

1. Psychiatrist or sociologist prognosis for success, from "favorable" to "unfavorable."

2. Utilizing a "Social Development Pattern" according to the inmates' behavior prior to their present offense. Inmate data was gathered from prison records.

3. Ascertaining inmate age when first leaving home (or foster home) for six months or more.

4. Utilizing a seven-factor prediction score, including 2 and 3 above, plus previous sentences, type of offense, education, and use of prison time. Each item was rated from +2 to -2.

Discussion

Glaser states that the results of the various approaches correspond to a review of 30 articles in which the case study method was never found more accurate than the statistical approach; he advocates the use of configuration tables.

Results from a study Glaser conducted with over 1,000 male Federal parolees released in 1956 and followed-up in 1959 are reported. Forty-eight percent had some post-release arrest records, but only 35% were returned to prison. Staying out of prison was the "success" criterion.

Each inmate was classified on 63 variables found in his prison records: offense, conviction, sentence, family background, childhood, length and type of employment, alcoholism, drug addiction or usage, marital record, psychiatric or psychological evaluation, prison assignments, disciplinary reports, self-improvement activities, communication with outsiders, and release plans and arrangements.

In order to obtain more striking extreme groups a middle-risk group was arbitrarily defined as those one-third the difference above,
and one-third the difference below 65; meaning above 76.7% was the high success group and below 43.3% was the unfavorable success group. The 63 variables were then examined to see which placed the greatest number of individuals out of the middle-risk group.

The most discriminatory variables include: prior convictions, age at release, satisfactory prison adjustment, and prior job history.

The major function of a prediction table report is to simply make a judge or parole board member aware of whether he is going with or against the odds so that he double checks his judgment. The configuration model allows judges and parole board members to see the effectiveness of the most significant variables.
PART III

ANNOTATED SUMMARY OF PREDICTION OF CIVILIAN DELINQUENCY

Problem

To analyze current thinking on delinquency prediction.

Scope

A review of major efforts to predict delinquency in terms of the instruments used.

Discussion

Minnesota Multiphasic Personality Inventory (MMPI): Hathaway and Monachesi (1953, 1957) review its application to delinquency. They believe personality variables are more useful in relation to delinquency than are environmental variables. The greatest finding is that many respondents fail to answer the scale carefully; not surprising considering that it was designed for adults, has 550 items, and takes an hour and a half to administer. They conclude that the MMPI in its present form has little value as a prediction tool.

Jesness Inventory: This is a personality inventory developed specifically for delinquents at the Fricot Ranch School for a California Youth Authority study. The scale contains 155 true-false items, contained under the following headings:

- Social Maladjustment: 63 items
- Value Orientation: 39 items
- Immaturity: 45 items
- Autism: 28 items
- Alienation: 26 items
- Manifest Aggression: 31 items
- Withdrawal: 24 items
- Social Anxiety: 24 items
- Repression: 15 items
- Denial: 20 items

From these, an Asocial Index can be constructed by omitting immaturity and denial. The first sample of boys, 8-14 years of age, included 145 institutionalized delinquents and 300 non-delinquents, and the first validation included 277 delinquent and 368 non-delinquent. At its best cutting point it would identify 75% of the delinquents with 65% true positives, where the base rate for delinquents is 20% (Perlman's 1959 estimated rate for the United States). (See Jesness, 1960, 1961, 1962, 1963.)
**KR Proneness Scale and Checklist:** This scale was developed by Dr. W. Kvaraceus (1945-1950) at Boston University. It consists of 75 multiple-choice items covering personality, family background, and school experience. The checklist contains 70 items to be filled out by the teacher. J.K. Balogh has studied the scale extensively (1956, 1958, 1960, 1962), and applied the scale to the largest sample (750 non-delinquents, 182 delinquents, and 453 boys termed "high morale"). The "high morale" group was also used by Kvaraceus and it included the well-intentioned leaders who made good grades in school. The scale discriminated between delinquents and non-delinquents, but was not validated as a predictive instrument. Bordua (1961) attempted to validate it for prediction and concluded it was more suited to measure social class than delinquency, and as such, when applied to a sample homogeneous in social class, the KD scale may not predict at all.

**California Psychological Inventory (CPI):** H.G. Gough of the University of California, Berkeley, developed this 48-scale general personality assessment instrument. The 54-item socialization scale, purports to measure degree of social maturity, probity, and attained rectitude has been used frequently in delinquency research. The theoretical basis of the scale is role playing. Gough and Peterson (1952) correctly identified 78% of a sample of delinquent and non-delinquent, however, there was no validation. Dinitz and Reckless (1957, 1958, 1960) and Scarpitti, et al (1960) used the scale to study the "self-concept" of delinquents. Rose concludes that the socialization scale of the CPI is unproven for prediction, but appears to have possibilities.

**Self-Concept Scale:** In a series of studies Reckless, Dinitz, and associates (1955-1960) attempted to develop a scale to measure if a subject viewed himself as a delinquent. The self-fulfilling prophecy was the theoretical rationale. Sixth grade boys selected by their teachers as being predelinquent (132) or non-delinquent (222) were discriminated significantly. Sixteen items correlated well with the CPI, and this was considered to be a validation (Donald and Dinitz, 1964). This scale is then dependent on teacher opinion and the effectiveness of the CPI.

Rosenberg (1965) developed a series of self-concept scales which were administered to 5,024 high school students in 10 New York schools. No validation was mentioned. The delinquent emerged as having low self-esteem and being withdrawn and anxious. The instrument was not used for prediction, but the scales do purport to measure many relevant aspects of behavior: Self-esteem, stability of self-image, faith in other people, sensitivity to criticism, feelings of happiness, day dreaming, psychosomatic symptoms, sensitivity to threats from others, intensity of discussion, parental interest, and relationship with father.
Bristol Social Adjustment Guides: These are statements to measure social adjustment of a child as seen by his teacher, social worker, or residential institution staff. D.H. Stott at the University of Glasgow (Scotland), developed the brief 10-15 minute scale (1956, 1958, 1960). In the 1960 sample, 415 delinquents on probation, aged 8-15, and 404 non-delinquent boys were rated by their teachers. Twenty-three percent of the delinquents and 71% of the non-delinquents fell in the "normal" group, and in the "maladjusted," 46% and 8% respectively. Stott hypothesizes that when applied to the entire Glasgow population in this age range, and taking into account possible future delinquency of non-delinquents by the age-specific base rates, the scale could correctly place between 50 and 75% of the delinquent and 50 to 90% of the non-delinquent, depending upon the cutting score.

Mulligan Scale: This scale was developed as part of a long-term follow-up study of 5,000 British children born in 1948 (Mulligan, et al., 1963). It is very short and can be filled out by the child's teacher. The scale yields three scores: Nervousness, aggressiveness, and a combination of the two. It was administered to the sample at the ages of 13 and 15, and it was found that the aggressiveness scale correlates highly with delinquents. The predictive power is unknown.

Rutter Scale: This is a short checklist of questions to be answered by the child's teacher and is very similar to the Mulligan Scale. This scale has been well validated for the 9-10 age group in a British sample. The results are "encouraging."

Behavior Description Chart: This chart, along with a sociometric test, "Who Are They," was administered to the sample of children studied in R.J. Havighurst's Growing Up in River City. The Behavior Description Chart was based on information furnished by someone knowing the child, and the children themselves answered the sociometric test. Two hundred and forty-seven (247) boys and 270 girls were studied in the sixth grade and followed through for nine years. Twenty percent (50) became delinquent. The scores were categorized in terms of aggression, withdrawal, and good adjustment. Fifteen of the 47 delinquents fell in the top 5% of the aggression scores, 21 in the top 10% and 32 in the top 25%. A correlation of .56 for boys was given for the scores between sixth, seventh, and ninth grade. It will take other studies to determine if this scale has any use as a prediction.

"Guess Who" Game: This "game" involves a series of derogatory statements and the child answers who in his class is most like the statement. Hartshorne and May designed this questionnaire and the New York State Youth Commission (1952) modified it to study 4,520 pupils in grades three to eight in 10 schools around Albany, New York. The "Guess Who" aggressive scale identified 46% of the delin...
quents, and when a teacher checklist was added the correct delinquent identification increased to 77%.

The "game" was used in Yugoslavia (1954) with 2,615 elementary school children. There it identified 54% of the delinquents, and when poor school achievement was added, identified nearly all of them. (The false positives were not listed in this article.)

**Glueck Prediction Tables:** Sheldon and Eleanor Glueck have produced several prediction tables. Comments are directed toward their 1950 book, *Unraveling Juvenile Delinquency*. Five hundred serious institutionalized, white delinquents were matched with 500 non-delinquents on age, general intelligence, ethnic origin, and residence area. Three tables were constructed covering: Social background; five of the character traits found in the Rorscharch test; and five personality traits from the psychiatric interview. The five-factor social background scale has been the most popular of the three because it does not depend on as much expertise of the examiner, nor is it as subjective as the other two scales.

Some of the criticisms that have been made of the study include: The sample is a matched group, and as such, is not what would be expected from an unselected population; 35% of the delinquents came from low delinquency areas and this may indicate different reasons for being delinquent; the offenders are all white; the delinquents were "really serious offenders"; the emphasis of the scale is on family disorganization and this may be an unfounded bias; and, the scales are based on the subjective histories of the two groups.

Bordua (1961) assesses the social background tables accuracy, using the Glueck's data, at 81.3% and its efficiency (that is, percentage reduction in error) at 62.1%, but he points out that using Perlman's national delinquency rate of 20%, the efficiency falls to 29.5%.

Many researchers have validated the Glueck tables. Those who have applied the social background table to already known results include: Black and Glick (1952); R.E. Thompson (1952); and others cited in E.T. Glueck (1960). Studies in which the tables were applied at the onset and then followed-up years later include: New York City Youth Board (1957, 1961, 1963); Craig and Glick (1963, 1964), and Washington, D.C. Maximum Benefits Project (C.D. Tait and E.F. Hodges, 1962).

The New York Project involved 803 boys entering the first grade in two schools; over half were Negro or Puerto Rican. By the age of 18, 14.6% became delinquent. Of the total sample, 91.7% were correctly predicted, 81.6% of the delinquents were correctly identified, and the percent reduction in error was 72.6%.
The Washington, D.C. sample studied 116 Negro boys, 39 Negro girls, 26 White boys, and 8 White girls between the ages of 5 and 14 who were referred for being delinquency prone. Of these, 67.9% became delinquent, 78.3% of the total population were correctly identified, 80.5% were correctly placed, and the percent reduction in error was 57.6%.

Rose concludes that the results of the Glueck table studies are hidden in doubt as to what ought to be predicted and with what one compares the results. The tables might be very good, or they might be very misleading.


Problem

To delineate some psychological and social variables which distinguish from non-delinquent adolescents, and to develop an objective method for discriminating between the two groups.

Subjects

Two hundred and fifty four (254) delinquents aged 11 to 19 years, who had been referred to a Nebraska juvenile county court for violation of any statute, and were still enrolled in school. Two hundred and thirty nine (239) controls were matched for age and sex.

Scope

Used Junior-Senior High School Personality Questionnaire (HSPQ), (IPAT, 1958), and the Color Pyramid Test (CPT, Schaie and Heiss, 1964), after the Dvorine Color Vision Screening Test had eliminated the color blind.

Discriminant function was used to extract predictors from the large body of data. A computer program based on the iterative technique was used to derive the multiple biserial correlation, beta-weights, b-coefficients, and correction for origin. The variables included: Socioeconomic status, 42 CPT scores, 14 HSPQ scores, 3 California Achievement Test scores; age, grade in school to total 62 variables.

Results and Conclusions

The results of the non-parametric variables include: Greater tendency for delinquents to come from broken homes ($\tau_{tet} = .28$), living with persons not their natural parents ($\tau_{tet} = .26$), to come,
from lower socioeconomic status home ($r_{et} = -.18$).

These results leave too much unexplained variance to be of practical value.

Criterion scores (C-scores) were computed for all subjects.

Forty variables were contributing to the multiple R when the cessation criteria were reached.

Using the C-score mean, and calling all of those scoring above "delinquent" correctly identified 76.8% of the delinquents and 75.2% of the controls. Making a third indeterminate category of $\pm 1/2$ SD of the C-score mean increased accuracy to 86.8% of the delinquents and 84.2% of the controls. The indeterminate category contained 39.5% of the subjects.

C-scores for the cross-validation sample were computed with the same regression weights. With no indeterminate category, 57.4% of the delinquents and 65.8% of the controls were correctly placed. With the indeterminate category removed, 63.8% of the delinquents and 64% of the controls were correctly placed. There were 34.9% of the subjects in the indeterminate category. All four classifications yielded significant chi squares ($p < .01$).

Delinquents did not do well on scale B of the HSPQ, which is said to be related to intelligence. The delinquents were more assertive, less anxious, less concerned with propriety, less patient, and less able to tolerate frustration than the controls. The controls were more at ease, more dependable, and generally more mature.

The author notes his delinquents were not "very delinquent"; only one boy had served a training school sentence. Less than 25% had committed "serious" acts, fewer than 20% had more than one offense in the two years preceding the study.


Problem

Subjects

One hundred and sixty eight (168) male offenders, aged 14-18 in a state diagnostic center.

Scope

Forms A and B of the HSPQ were given, plus a 25-item rating scale to from three to eight of the boys' cottage staff and re-administered after "several months." Raw score reliabilities of tests were calculated along with multiple regression equations for prediction of scores on each of the 25 scales, using the Wherry-Doolittle method.

Results and Conclusions

Reliability of the mean criterion ratings ranged from .50 to .92, with a median of .86.

Multiple R's for the HSPQ ranged from .17 to .41, with a median of .30. All but one R was significant (p < .01). Combined HSPQ and scale ratings produced R's from .34 to .61 (median R = .53) with all R's significant (p < .01).

There was no cross-validation.

The authors admit the predictive efficiency is low, but maintain that the results do indicate diagnostic rating shows more promise than diagnostic testing in a task of predicting treatment institution behavior.

Problem

To discuss the history of studies concerning school achievement and delinquency.

Scope

A comprehensive analysis of school achievement and delinquency.
Discussion

History

1919 - Miner found 86% of institutionalized boys were educationally retarded.

1921 - Doll found only five percent of the boys in a New Jersey institution reached or exceeded average achievement test norms.

1934 - Glueck and Glueck (1940) investigated 1,000 delinquents and found 85% were retarded in school abilities. Sixty-two percent were two or more years behind grade placement. Eighty-five percent displayed antisocial behavior in school. Fifty-nine percent tested below average in intelligence, but only 13% were "feebleminded." Sixty-four percent were "truant." The average age of first delinquent behavior was nine years, seven months.

1950 - Glueck and Glueck's 500 delinquents matched with 500 non-delinquents in respect to ethnic derivation, age, IQ, and area of residence. Their delinquent school achievement was far below the non-delinquent. Truancy was the most frequent manifestation of initial maladjustment. Delinquents expressed a violent dislike of school, resentment of its restrictions, and lack of interest in work. Delinquents disliked subjects requiring strict logical reasoning, persistency of effort, and those dependent on memory.

1960 - Kvarceus summarized significant personal and environmental traits of delinquency. Among the listed traits (other than social class and family environment) are: Low IQ, "poor" or failure grades, repeating grades, strong dislike or hostility toward school, truancy, intent to leave school early, vague or no educational-vocational goals, special class placement, feeling that he does not "belong" in the classroom, and misbehavior (in 1970, Gath, Tennent, and Pidduch found that even when delinquents' IQ's exceeded 115 there was a serious degree of "overall educational underfunctioning").

Reading and Delinquency

Studies correlating delinquency and reading disability have been hampered due to inconsistencies in defining reading retardation, but in general, evidence supports a relationship between the two, (Silberberg, Iverson, and Silberberg, 1969).

1926 - Perceival, in examining causes for school failure found that 99% of those first grade students not promoted failed in
reading; 90% in grade two and almost 70% in grade three. As late as grade six, one-third of the failures were attributed to poor reading. Roman (1957) suggested "in retracing the course of the development of an individual's delinquent behavior, it is not unusual to find the trend—reading retardation... truancy... delinquency..." Studies by Sullivan (1927), Lane and Witty (1934), Hill (1935), Bond and Fendrich (1936), and others found delinquents were generally retarded in reading. Gates (1936) found evidence suggesting a serious reading disability might eventually lead to criminal activities. Gates felt that reading disabilities disrupted the child's school career and disturbed personal and social adjustment. Parker (1940) believed reading disability led to feelings of inferiority and frustration which might result in antisocial or regressive behavior. However, Benning, Feldhusen, and Thurstone (1968) found that tutored remedial reading had no effect on the social adjustment, self-concept, anxiety level, or reading achievement of fourth grade children who were disruptive and aggressive in the classroom. They also found that aggressive behavior was predictive of comparatively low achievement in school, low social adjustment ratings, continuing higher frequency of aggressive-disruptive behavior in the classroom, and more frequent contacts with law enforcement agencies.

There has been little research done in the area of sex differentials in delinquency. However, it is known that boys outnumber girls in respect to reading problems. Silberberg and Feldt (1968) cite findings ranging from ratios of 3:1 to 10:1. Data from the state of Minnesota suggested poor reading occurred equally among delinquent boys and delinquent girls. A comparison of a boy's and a girl's training school indicated 60% of the children in each school were deficient one or more grades in reading.

**Intellectual Factors and Delinquency**

Cozad and Ramsey (1966) found 24% of a sample of 300 delinquent boys and girls failed a hearing test, while 58% showed some speech disorder.

Wechsler (1958) spoke of "acting out" individuals scoring significantly higher on performance items as compared to verbal items on Wechsler Intelligence Tests. The high performance-low verbal IQ pattern has been validated on several delinquent samples; (Levi, 1943; Weider, Levi, and Reisch, 1943; Diller, 1952; Rutter, et al., 1966). Silberberg and Feldt (1968) found the performance-verbal discrepancy as early as the primary grades. The Glueck and Glueck (1952) study found delinquents somewhat better than normals on intellectual tasks.
depending on physical relationships (block designs, object assembly), and poorer on tests involving symbol mediation (vocabulary and information). Rogers (1951) felt that this concrete conceptual attitude was a prominent characteristic of the delinquent child. Schulman. (1952) concurred with Rogers, that delinquents rely heavily on concrete thought processes.

Summary

It is suggested from the research that many of our delinquents have linguistic handicaps. The linguistic abstract teaching methods used in schools can lead to repeated frustration at the inability to learn and consequently some form of protest behavior would not seem unlikely to occur. In fact, truancy is one of the earliest manifestations of delinquent behavior. Other factors such as familial relationships and socioeconomic level may compound the problem as the maladaptive behavior develops.

Comments on Education Process

Traditional school achievement places heavy emphasis on language abilities and specifically reading. Undoubtedly children with poor language skills will have many unhappy and unsuccessful school experiences.

The following suggestions are cited:

1. Longman (1960) suggests some children are incapable of handling the generalizations and transfer necessary for reading. These children respond best socially and academically to concrete, simple directions specific to each situation. Verbal repetitions and many rehearsals act as reinforcers.

2. Traditionally, education attempts to enhance the skills found in the more economically successful segment of society. An attempt to build a curriculum based on the total skills found in the entire population might open a new avenue of opportunity.

3. Attempting to emphasize remedial work in the skills children are deficient can lead to more frustration and self-deprecation.

4. Reducing requirements for the high school diploma does not add to anyone's wealth of knowledge.

5. Silberberg and Silberberg (1969) are developing a bookless approach to education, in which reading is taught as a separate, isolated skill and the actual education of the child is conducted, utilizing audio-visual and discussion techniques.

6. May (1969) has shown that in at least some cases simply having a job reduces recidivism. Jensen (1969) and Berg (1969) in
summarizing a body of research concluded that success on many jobs in society is not related to school success. It can be readily seen that many jobs in society do not depend on a high degree of literacy. It is not the talents of the children that require changing, but rather the values and institutions of the society which must be redesigned to accommodate the variety of talents which children possess.


Problem

To apply an attitude measure to potential delinquents to see if those who are future delinquents may be separated from those who will never become delinquents.

Subjects

Eighty-three boys, 16-19 years of age from Washington, D.C. There were 38 school dropouts who composed the potential delinquent sample and 45 school boys classified as "normals."

Scope

The Jesness Inventory was read to two sample groups. The subjects were matched by I.Q., but were significantly different in age (p < .01). The results were also compared with Jesness' original sample of 173 delinquents.

Results and Conclusions

When the non-delinquents were compared to the delinquency-prone subjects, significant differences were found in the following subscales:

- Immaturity (.01)
- Repression (.01)
- Social Anxiety (.01)
- Affectivity (.05)

The delinquency-prone youths averaged 10 months older, but were significantly more immature.

The delinquency-prone tended to be less emotional and became less involved emotionally.
Pattern analysis between the two groups and Jesness' delinquent sample yielded a continuum with three clusters from delinquent to delinquency-prone to normal with the delinquency-prone scores being closer to delinquent than normal.


Problem

To determine whether false positives and false negatives exist as stable groups or merely reflect random error.

Subjects

Nine hundred and ninety-six (996) high school boys

Scope

The California Psychological Inventory (CPI) Socialization (So) scale was the instrument chosen to select the groups. Scores over 30 constituted the high So group, and under 30 were the low So subjects. Thirty-three matched pairs of true and false negatives and 27 matched pairs of true and false positives were selected for the primary analysis. A secondary analysis comparing high and low So groups involved the 27 highest and 27 lowest scoring non-delinquent and the 57 highest and 57 lowest scoring delinquent. The groups were assessed by:

(a) Six self-report delinquency measures (Kulik, 1966)
(b) Nine family relation scales patterned after Nye (1958)
(c) Motoric and ideational expressive dimensions (Stein, 1965; Helm, 1968)
(d) Four moral judgment scales (Stein, Sarbin, Kulik, and Chu 1967)
(e) A self-esteem and stability of self scale (Rosenberg, 1965)
(f) A manifest anxiety scale (Bendi, 1956)
(g) Marlow-Crowne's Social Desirability Scale (1960)
(h) The MMPI Lie Scale (Hathaway, and McKinley, 1951)
(i) Vocabulary intelligence test (Borgatta and Corsini, 1964)

Results and Conclusions

The findings indicate that the differences between comparative groups exceed chance.

The Legal and School Difficulty Scale (LS), which disclosed the greatest group differences was added to the CPI to check their joint
predictive power. (Cutting scores of 14.5 on low So individuals and 9.5 on high So individuals were set with the LS scale.) On a new sample of 120 subjects randomly selected from the remainder of the 996, the CPI alone accurately predicted 72.5% of the sample. When the So cutting score was joined with the LS cutting score the accuracy became 87.5%, a significant increase (p .03). The new sample consisted of 65 non-delinquents and 55 delinquents.

The authors conclude that the So scale misses constitute definite groups with their own specific characteristics.


Problem

To compare some of the more frequently used instruments for predicting delinquency.

Subjects

One hundred and ninety-seven (197) High school boys and 200 institutionalized delinquents between the ages of 15-18. All subjects were from the working class.

Scope

The following instruments were used:

(a) MMPI Delinquency Scale
(b) Index of Incipient Alienation (Jarrett and Haller, 1964)
(c) Srole Scale (1956), an anomia scale for adults
(d) Nye Short Scale (1957), a self-reported delinquency scale

The authors compared the scales on an already defined group by means of a t-test.

Results and Conclusions

Delinquents scored higher on all three scales. There was no significant difference between older and younger subjects between groups.

Negro subjects tended to score higher than White subjects.

Differences between delinquent and non-delinquent on tests held regardless of race.

North-Hatt (social-class) Scale Scores were virtually identical.

Problem

To assess the reliability of Quay's (1964) factor analysis of Peterson's (1961) problem checklist with delinquents in order to differentiate between successes and failures among parolees of a state training school.

Subjects

Sixty-five recidivists (R) and 59 nonrecidivists (N) with no significant differences between the two groups in age, IQ, and length of institutionalization.

Scope

Quay used three factors: (1) aggressive acting out, (2) neuroticism, and (3) inadequacy.

Results and Conclusions

Using Quay's factor loadings, 32 items clearly loading on a single factor were scored and split-half reliability coefficients were determined. The inadequacy factor was too low to warrant further analysis (r = .26). However, factor 1 (r = .92) and factor 2 (r = .81) seemed both reliable and independent (R 1, 2 = .21).

No difference between groups was observed for factor 2 (M_R = 7.15, standard deviation (SD) 7.13; M_N = 6.19 SD = 5.12), but factor 1 yielded a significant difference (M_R = 10.34, SD = 5.89, M_N = 5.12, SD = 4.69, p < .0001).

Despite recidivists being rated as an aggressive group there was a significant overlap of the two groups on factor 1, and the correlation between recidivism and factor 1 was only .55.


Problem

To measure the efficiency of moderator variables as a means to increase the ability of clinicians to predict the institutional and post release behavior of inmates.
Subjects

First admissions (152) to the Wisconsin School for Boys.

The sample had the following characteristics: A median age of 15.9 years, range 12-18; they had completed 8.8 grades of school and had an average scholastic achievement slightly below the seventh grade level. They had been committed for: auto theft (28%), burglary (23%), truancy (11%), uncontrollability (10%), theft (9%), aggravated assault (5%), and sex misconduct (4%). Their average length of stay in the institution was 4.5 months. Forty-five percent had previously been in a juvenile correctional institution. Seventy percent came from lower socioeconomic class backgrounds. Forty-nine percent came from broken homes.

Scope

Moderator variables (variables correlated with degree of predictability of inmates as measured by the relative magnitudes of the difference (D) scores between predictor and criterion variables) were developed. The moderator variables were then used to eliminate less predictable subjects from a cross-validation sample.

Results and Conclusions

Moderator variables were used to remove less predictable subjects from the cross-validation sample; this resulted in moderate increase in correlation between predictor and criterion variables when a third of the least predictable subjects were removed. In addition, a more substantial increase resulted when a half of the least predictable subjects were similarly removed. This method shows potential value as a means of facilitating more accurate classification of inmates.

One limitation of this method is that it excludes from prediction the one-third or one-half of the subjects who are relatively unpredictable.


Problem

To determine the validity of the Bristol Social Adjustment Guides (BSAG) in predicting delinquency.

Scope

An analysis was made of the data given in The Social Adjustment...

Results and Conclusions

Two methods were used to analyze the data given in the manual on the usefulness of the Bristol Social Adjustment Guides. Each method shows that the predictive efficiency in terms of the ratio of valid positives to false positives is no greater than a quarter of that claimed in the manual and may be even less. The actual findings were four valid positives to six false positives. It is suggested, therefore, that the use of the guides for predicting delinquency be discontinued.


Problem

To devise an effective computer based decision system to aid the probation caseworker in deciding which treatment will result in the individual not becoming a recidivist.

Subjects

Juveniles (2,290) referred to seven Southern California probation departments in October and November, 1963. Re-referrals were obtained in May, 1965.

Scope

Simulated models of the probation process and the decision-making process were constructed. The information fed into the models were analyzed using Bayes’ theorem. By using the computer continuously to update the information the best decisions and the most likely to be administered decisions could be monitored. McEackern believes 290 variables have been defined as being possibly useful in making probation decisions. In this study 20 variables were selected to test the efficacy of the models. Eleven of the variables dealt with background information and the remainder with disposition and treatment given, as listed in Figure 1.
FIGURE 1. PREDICTOR VARIABLES

"Automatic" Background Variables

1. Sex
2. Race
3. Age
4. Offense Category
5. Referral Source
6. Seriousness of Offense
7. Number of Companions Present at Offense

"Non-automatic" Background Variables

8. Referral History
9. Number of Prior Referrals
10. Home Status (where and with whom the youngster is living)
11. Marital Status of Parents or Guardians

Disposition and Process Variables

12. Intake Disposition
13. Whether Contested
14. Whether Detained
15. Number of Days Detained
16. Time Between Referral and Court Trial
17. Whether an Attorney was Present During the Hearing
18. Court Disposition
19. Placement
20. Final Disposition

Results and Conclusions

The probability of correct classification without using any information was 43% and the average using the demonstration model was 64%.

The greatest advantage in using Bayes' theorem is that it is a formally correct way of viewing probabilities at any spot in the probation process in light of the information given at that spot. The Bayesian model can be used with any number of variables without changing the equation.

An analysis of 283 variables applied to the 2,290 juveniles is given, and it is concluded that far more than a youngster's background, detention, disposition and delinquent history are needed in order to improve procedures in the probation process.
Items 5 through 20 account for significant differences when the results are compared to the base rate of 43%.

When the children were first referred to the probation department, 42% were dismissed at intake. There were significant differences between those detained and those released at intake. These included:

1. Number of moves in five years (.001)
2. Number of guardians (.001)
3. With whom minor was living (.001)
4. Family income (.005)
5. Education of head of household (.001)
6. Father unemployed (.001)
7. Number of children in the family (.01)
8. Age (.001)
9. Sex (.001)
10. Ethnic group (.001)
11. Grade in school (.001)
12. IQ (.001)
13. In or out of school (.001)
14. Days absent last year (.001)
15. Days absent this year (.001)
16. Religious participation (.05)
17. Number of prior offenses (.001)
18. Probation history (.001)


**Problem**

To organize some of the differences between recidivists and non-recidivists.

**Subjects**

Male subjects (158) between the ages of 11-14, coming into court for the first time from September 1960 to August 1961, in Devon, England.

**Scope**

Survey of characteristics of those who offend more than one time, with a follow-up survey three years later. Contingency tables were designed and correlations computed from information gathered by probation officers.
Results and Conclusions

The follow-up survey indicated the following: (a) 55% committed no additional offense; (b) 25% committed one additional offense; (c) 10% committed two additional offenses; (d) 8% committed three additional offenses; and (e) 2% committed four additional offenses. Larceny was the major offense; 75% of first offenses, and 50% of all subsequent cases in court.

Following are highly significant (.01) characteristics of those who are not recidivists:

1. Parents had a strong relationship with each other and spoke with affection or respect for each other.

2. Mother provided persistent discipline input when the tie was close between mother and offender.

3. Non-recidivists regularly associated with members of their own age group.

When probation officers predicted success, a third of those who did not return were expected to, and two-fifths of those who came back to court were not expected to return.


Problem

To predict if a delinquent will recidivate.

Subjects

A third of all boys committed to Borstal training in FY 1946. The follow-up was conducted in 1952. There was a total of 385 boys; 221 successes and 164 failures.

Scope

Sixty items of information were assessed when a period of three years had elapsed since completion of all sentences. Items were chosen from those that were commonly believed to be important in predicting delinquency. Both subjective and objective items were included. The items were weighted according to their probability of occurring with a certain outcome.
Results and Conclusions

It was found that at least 80% of those predicted to be reconvicted were reconvicted within three years after release. Also, almost the same results could be obtained by using a follow-up period as short as one year. It was further shown that the sooner after release a boy failed, the more serious his failure was likely to be.

Four factors were chosen to compose the prediction device. They were, in order of strength:

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous convictions</td>
<td>Maximum of 45</td>
</tr>
<tr>
<td>Longest period in any one job</td>
<td>Maximum of 11.7</td>
</tr>
<tr>
<td>Living in industrial area</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Living with parent(s)</td>
<td>0 or 7.5</td>
</tr>
</tbody>
</table>

By forming three groups according to weighted scores this correctly identified 75% of the success group and 70% of the failure group. Almost 40% of the sample constituted the unknown risk category.

The unknown group was further separated into two groups with one having twice the success rate as the other by adding these five factors:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence</td>
<td>2</td>
</tr>
<tr>
<td>Last occupation of lad</td>
<td>2</td>
</tr>
<tr>
<td>Leisure activities</td>
<td>4</td>
</tr>
<tr>
<td>Occupation of head of household</td>
<td>1</td>
</tr>
<tr>
<td>Family crime record</td>
<td>1.5</td>
</tr>
</tbody>
</table>


Problem

To test the self-concept measure as a technique to permit the early identification of potential criminals.

Subjects

One hundred and two (102) male and 99 female non-prisoners, and 113 male and 76 female prisoners.
Scope

The 81 items on the adjective checklist of the Activity Vector Analysis (AVA) were analyzed for discrimination between a sample of 100 male prisoners and 5,000 applicants and employees representative of the sex and occupation distributions in business and industry.

Results and Conclusions

Forty-one items were discriminative enough to become a separate scoring stencil called, "Social Conformity." A significant (p = .001) sex difference on the experimental measure was found among non-prisoners and prisoners. Separate validities among these sub-samples were obtained for males and females. Correlations between the new measure and the factor scores of the 16 personality factors test yielded two that were significant at .05 (factors B and F). The deviation quotient distributions for male-prisoners and non-prisoners yielded a cross-validity of r_{bis} = .764.


Problem

To determine whether three clinically separable groups of delinquents can be differentiated on the basis of MMPI scores.

Subjects

Thirty-seven inmates classified as socialized delinquents (SD); 32 as unsocialized aggressive (UA); and 27 as runaway delinquents (RA). Age, IQ, and education were not significantly different among the groups.

Scope

Inmates of the Iowa State Training School for Boys were classified as SD, UA, or RA, according to recorded delinquent behavior and an observation sheet of 13 items given to at least three staff members who came in contact with each subject.

Results and Conclusions

SD could be discriminated from UA and RA with a 71% chance of accuracy, correctly predicting 54% of the SD and 81% of the non-SD by considering the following profile of SD boys:
1. No score above 69.

2. No score above 79, no scores exceeding psychopathic deviate (PD) or mania (MA) scores, whichever was highest, and a psychasthenia (PT) score of 8 or less.

3. No score above 79, neither PD nor MA the highest, and PT scores 16 or less.

4. PD or MA scores only score above 79, and PT scores, 24 or less.

The difference between SD and non-SD was significant ($p < .01$). The UA group was significantly higher in paranoia (PA) (presumably more suspicious). The RA group was significantly higher in masculinity/femininity (MF) (suggesting poorer masculine identity). SD as a whole had much lower MMPI scores.

The findings are consistent with the hypothesis that socialized delinquency represents adaptive goal-oriented behavior, while unsocialized aggressive and runaway delinquent behavior represents maladaptive frustration responses; either fright or flight.


Problem

To test the efficiency of an attitudinal configuration model (ACM) in the area of delinquency prediction relative to three other measures.

Subjects

Jefferson County, Kentucky, high school students (1,274) were divided by the Nye Scale of Delinquent Behavior; 334 (26%) were "most" delinquent, 940 (74%) "least" delinquent.

Scope

The ACM questions the expectations of parents and friends. The underlying assumption is that perceived expectations of significant others guide real behavior. The author compared ACM with: (1) Glueck Five Factors of Social Background; (2) Socialization (Sb) scale of the California Personality Inventory (CPI); and (3) Internalization of Social Norms (IA), measured by asking seven questions like: "Would you expect a high school student to ..."
Results and Conclusions

When the ACM results were compared to the Nye scale of defined delinquents, 82% of the sample were accurately predicted (p < .001; Tule's Q = 1.00).

The Glueck Social Factors (GSF) scale predicted efficiently for 53.9%; the So Scale of the CPI accurately predicted 29.4%; and the IA predicted accurately 59.9%.

The ACM predicted males slightly better than females.

The relationships between the various scales were computed, and the significant relationships are listed below:

- IA and GSF related at .05 level (Q = .23)
- ACM and IA related at .001 level (Q = .59)
- ACM and So related at .001 level (Q = -.99)

The results of this study provide a good example of the differences that the different definitions of delinquency make.

The results lend support to reference group theory with delinquents perceiving friends to be more significant than parents.


Problem

To identify the true delinquents from the pseudodelinquents in an "acting up" school population.

Subjects

Five hundred true delinquents and a matched group of 500 true non-delinquent boys aged 11-16.

Scope

True delinquents were operationally defined as those who would commit repeated acts that would be punishable as crimes if they were over 16 years of age. Pseudodelinquents were those children who occasionally deviate from socially acceptable conduct norms, but whose school misbehavior does not indicate an underlying delinquent process.
Two predictive tables are presented which discriminate true delinquents from pseudodelinquents found by the Glueck Three-Factor Social Prediction Table study in their 1950 book, Unraveling Juvenile Delinquency. These tables would be expected to be applied after maladaptive behaviors are noted in school.

Results and Conclusions

The first scale included: (1) recreational preferences; (2) attitude toward school; (3) age of companions; and (4) frequency of truancy. True delinquents (91.7%) were correctly identified and 75.6% of the pseudodelinquents were correctly identified.

The second scale included: (1) keeping late hours; (2) stealing rides/hopping trucks; (3) running away from home; (4) smoking at an early age; and (5) sneaking into theaters and/or subways. True delinquents (86%) were correctly identified and 84% of the pseudodelinquents were correctly identified.

The author believes these tables might be a great benefit in determining which seemingly delinquent child really is the potential delinquent; she notes that both tables are more efficient than the Glueck Three-Factor Social Prediction Table.


Problem

To objectively analyze the relationship between two levels of personality: public interpersonal behavior and underlying character structure.

Subjects

Student nurses (251), male psychiatric patients (413), female psychiatric patients (131), and penitentiary inmates (356). Negroes were excluded.

Scope

The model of interpersonal public behavior chosen for this study was devised by Leary (1956-1957). This was assessed by the Minnesota Multiphasic Personality Inventory (MMPI). Public behavior is viewed as a two-dimensional grid: the vertical axis measuring dominance-submission; this was measured by MMPI T-scores in the formula,
Dominance = (Ma-D) + (Hs-Pt); and the horizontal axes measuring love-hostility. Love-Hostility = (K-F) + (Hy-Sc). Raw scores were converted to a standard score from Leary's manual and placed in their location on the grid. The interpersonal behavior variables are viewed as a counterclockwise circular continuum, divided into the following octant:

<table>
<thead>
<tr>
<th>Interpersonal Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptive Category</td>
</tr>
<tr>
<td>Managerial</td>
</tr>
<tr>
<td>Competitive</td>
</tr>
<tr>
<td>Critical</td>
</tr>
<tr>
<td>Skeptical</td>
</tr>
<tr>
<td>Self-effacing</td>
</tr>
<tr>
<td>Docile</td>
</tr>
<tr>
<td>Cooperative</td>
</tr>
<tr>
<td>Responsible</td>
</tr>
</tbody>
</table>

The subjects' underlying character structure was determined by the intersection of the subjects' PD and MF T-scores when plotted on a special diagnostic grid.

Results and Conclusions

The results are presented in percentage form as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong healthy facade</td>
<td></td>
</tr>
<tr>
<td>Underlying narcissism, hostility</td>
<td></td>
</tr>
<tr>
<td>Student nurses</td>
<td>87.7%</td>
</tr>
<tr>
<td>Male patients</td>
<td>60.5%</td>
</tr>
<tr>
<td>Female patients</td>
<td>59.0%</td>
</tr>
<tr>
<td>Prisoners</td>
<td>29.0%</td>
</tr>
</tbody>
</table>

The results suggest that prediction of group classification is highly discriminating.


Problem

To identify potential delinquents upon entrance into public schools.
Subjects

Delinquents (500) and non-delinquents (500) matched in age, ethnic origin (all white), intelligence, and residence.

Scope

To determine the instruments to be used for identification of potential delinquents, an intensive study in Boston was conducted of 500 delinquents and 500 non-delinquents. A total of 402 traits and factors were studied by various tests. Three predictive devices were obtained from the significant findings: (1) incorporating five traits of character structure (social assertiveness, defiance, suspiciousness, destructiveness, and emotional liability); (2) utilizing five traits of temperament (adventurousness, extroversion in action, suggestibility, stubbornness, and emotional instability); and (3) utilizing five factors of the "under-the-roof-culture" (affection of mother for boy, affection of father for boy, supervision of boy by mother, discipline of boy by father, and family cohesiveness).

The last devices were administered in 1952 to a New York sample of 303 children, 5-1/2 - 6 years old, 130 White, 131 Negro, and 42 Puerto Rican.

Results and Conclusions

A 4-year follow-up was completed by Craig and Glueck (1963) on 244 boys. Of those 193 boys predicted to be non-delinquent, 96.4% remained non-delinquent. Of those 27 boys predicted to have a very high chance of delinquency, 85.1% had become serious or persistent minor offenders. Nineteen boys were in a middle group, predicted to have about an even chance of delinquency or non-delinquency, nine had become delinquent and 10 remained non-delinquent.

Hodges and Tait (1963) in the Maximum Benefits Project, Washington, D.C., revised the five factors into three (which, in the Boston sample, correlated with a coefficient of .96). The three factors are: family cohesiveness, supervision by mother, and discipline by mother. The sample included 132 boys and 47 girls from a high delinquency area whose teachers believed them likely to become delinquents. Twenty-one were identified as non-delinquent and 20 had remained non-delinquent after eight years.

Of those identified as potential delinquents, 81% were already delinquent (some of these were only 14 years old and had three years of follow-up to continue). Only four were not clearly identified as delinquent or non-delinquent.

The authors conclude that once potential delinquents are identified, preventative programs are necessary. They suggest that when
potential delinquents are found, the clinics working with the schools provide counselors to work with the parents on modifying parental attitudes and behavior.


Problem

To assess the validity of the Glueck Five-Factor Social Prediction Table and the validity of treatment used to prevent children from becoming delinquents.

Subjects

There were 29 "treated" children and 29 "controls" who received no treatment at all. All children were chosen from those expected to have over a 50% chance of becoming delinquent and were matched on neighborhood, age, IQ, ethnic group, and prediction score.

Scope

This study evaluated the 1952 Glueck Five-Factor Social Prediction Table. The treatment group involved treatment in a child guidance clinic for an average of four years. Cases in the clinic were assigned at random. The study took place over a 10-year period.

Results and Conclusions

Both experimental and control groups had the same number of delinquents during the 10-year interval. The average age of declared delinquency was two years higher in the treatment group.

Overall, those predicted to have a "high probability" of delinquent behavior by their scores became delinquent 78% of the time. Those cases with "moderate-to-even" scores became delinquent 23% of the time.

The authors conclude that treatment might be more effective in pre-kindergarten groups.

Problem

To make a critical examination of the New York City Youth Board's use of the Glueck Social Prediction Table.

Scope

An analysis of the method, procedures, and results of the New York City Youth Board's test of the five-factor and three-factor Glueck Social Prediction Tables.

Results and Conclusions

MacDonald doubts the thoroughness of the follow-up and scoring of the Youth Board's application of the prediction tables. She further states that whether any screening device to identify future delinquents can be used effectively and with proper safeguards remains to be seen. MacDonald believes more is known now about identifying troubled children than about helping them. The New York City Youth Board published a "Manual of Procedures for Application of the Glueck Prediction Table," which the author feels is a premature, if not irresponsible, promotion of a screening device that has not been proved. She concludes, "It is indeed a verdict before a full and fair trial."


Problem

To conduct a computer analysis of the Glueck's data in their book, Unraveling Juvenile Delinquency.

Scope

An attempt to answer criticism of the Glueck's study, Unraveling Juvenile Delinquency, and the Glueck methodology.

Discussion

One criticism was that there was missing data on some of the sample. There were 400 items in the study. Dr. LaBrie provided
estimates in the missing observations. No significant changes in the analyses occurred; therefore, he concludes the data were missing randomly.

A second criticism was that the 50-50 delinquent/non-delinquent sample was not representative. LaBrie states that since the groups were matched in education, residence, intelligence, etc., that all potential delinquents, and as such, give the best probability for judging effectiveness.

The last criticism considered was the Gluecks' use of univariate analyses instead of multivariate analyses. LaBrie states, "It is quite safe to say that the prediction devices developed by the Gluecks are as efficient as those developed by multivariate techniques...."

The Glueck analyses yielded five factors for optimum prediction. Multivariate analyses reaffirmed the first four and placed "rearing by parent substitute" in place of "family cohesiveness" as the fifth factor.


Problem
To predict success or failure of juvenile boys on probation.

Subjects
First time male probationers, aged 8-15, in Glasgow, Scotland, in 1957.

Scope
The Bristol Social Adjustment Guides (BSAG) was completed by teachers of boys who were on probation (a non-delinquent control group was also used). The BSAG is a measure of behavior-disturbance based on objective indications, consisting of 163 items found to be characteristic of maladjustment (at a 1% level of risk) and of 49 items indicating stability. The follow-up was two years after the teachers filled out the BSAG.

A delinquency prediction instrument was developed from the preponderance of "maladjusted" items marked for the probationers. This gives a prediction score from which a prognosis of future delinquency can be made.
Results and Conclusions

The most disturbed group (score of 30+ on the BSAG) showed themselves twice as likely to commit a further offense while on probation; those in the highest prediction score group were nearly three times more likely to do so, compared with those with a prediction score of 0.

It was calculated from this sample that a prediction score at which one in two of those adjudged delinquency prone actually become delinquent will pick out 70% of the delinquents in a school population.


Problem

To predict delinquency and school dropouts prior to the occurrence of the behavior.

Subjects

The school records of 402 subjects were obtained in 1962 after being tested in the 1957-58 school year. All were males in the seventh grade at the time of testing. Fifty of the subjects had dropped out of school and 30 had become delinquent.

Scope

A simultaneous double cross-validation was carried out and the data from the three criterion groups were subjected to a multiple discriminant analyses. The predictor measures numbered 10.

Results and Conclusions

The first cross-validation study correctly identified 70% of the deviants at the expense of 37% of the false positives from the normals. The second cross-validation correctly identified 65% of the deviants and misclassified 34% of the normals. The authors do not recommend use of the test battery in total due to the large percentage of false positives, but they do believe specific predictors warrant further consideration.

Possible efficient predictors of future academic or legal problems include:
1. Poor Sequential Test of Educational Progress (STEP) performance.
2. Junior Personality Quiz (JPQ811) score in the surgent range.
3. Seventh grade peer nomination as a "wild one."


Problem
To examine the differences, if any, between Negro and White socialization.

Subjects
Boys aged 14-17 years from a Washington, D.C. slum area with an eighth grade education. Eighty-seven were from a detention center for "mild" acts; 87 from institutions for "serious" crimes; and 87 non-delinquents from slum areas (238 were screened before finding 87 with non-delinquency records).

Scope
Negro non-delinquent versus White delinquents; Negro serious and mild delinquents versus White delinquents; and Negro non-delinquents versus Negro serious and mild delinquents. Used a 45-item California Personality Inventory (CPI); Delinquency (De) Scale; the five family items of the Glueck predictive factors; and 25 bi-polar items dealing with socialization (12 positive, 13 neutral or negative statements) in terms of self-concept.

Results and Conclusion
On the CPI (De) Scale the non-delinquents had a mean score of 26.43 (SD of 3.15), the mild delinquents averaged 28.22, and the serious delinquents 30.32. (In relation to other studies, California prisoners' means were 26.24; "good boys" were 14.6; potential delinquents were 22.6.)

Five items of the 45 were very significantly discriminating (four of the five dealt with the family situation) among the three groups. Using Gough's cutting score of 26 (after multiplying the score by 1.2 to make up for having less items) correctly identified 51% of the non-delinquents, 59% of the mild delinquents, and 82% of the serious delinquents. On the Glueck scale, each of the five items
was originally beyond the .001 level of confidence among the three groups.

The socialization index dealt with personal values and a boy was thought to have a good self-concept if he had twice as many positive responses as negative ones. Seventy-five of the non-delinquents, 58 of the mild delinquents, and 50 of the serious delinquents had a positive image of self. These differences are significant beyond the .001 level of confidence. The Gough De Scale scores from five other studies were also presented for comparison.

It was concluded that dominant Negro high delinquency areas do not include the kinds of social institutions which restrain undesirable behavior in similar White neighborhoods. The exception is the family unit, since in this study it did differentiate the groups.


Problem

To take certain deductions that have been made from Eysenck's theory and see if they can be refuted (or validated) by empirical test.

Subjects

Juvenile offenders (290) in three Borstal institutions.

Scope

Eysenck's theory of personality led to two types of predictions: (1) the offender would be an extrovert; or (2) he would tend to be either an extreme extrovert or an extreme introvert. A shortened Maudsley Personality Inventory was used to assess extroversion-introversion on this sample. Eysenck's original non-delinquent population scores were used as the control measure.

Results and Conclusions

The mean scores and distribution of scores as indicated by the standard deviation from the mean did not differ in the delinquent sample from the norms presented by Eysenck. Further, the mean scores and distributions of scores did not significantly differ between institutions. Also, inmates released quickly did not differ in their personality scores from those discharged later from the institution. Therefore, concludes the author, all the predictions made from the theory have been refuted by the data.
Problem

To investigate the relation between anonymously admitted criminality and: (a) Factor I -- psychopathic personality traits; (b) Factor II -- emotional maladjustment; (c) Factor III -- familial dissension; (d) Factor IV -- low n achievement; and (e) Factor V -- religiosity.

Subjects

Fifty-four female and 25 male students at Bar-Ilam University, Israel.

Scope:

- The following instruments were administered:

1. Admitted Criminality Scale (ACB)
2. Gough Socialization Scale (So)
3. Quay and Peterson's Delinquency Scale (De)
4. Edward's n Achievement Scale (n Ach)
5. Nineteen-Point Religious Belief Self-Rating Scale (RBS)
6. Nine-Point Religious Observance Self-Rating Scale (ROS)

NOTE: Numbers 2 and 3 contain items of Factors I, II, and III.

Results and Conclusions:

Higher ACB scale scorers obtained significantly higher Factor II scores (mean=7.94, SD=3.24) than low ACB scale scorers (mean=5.5, SD=3.24; t=2.085, p<.05). Significant negative correlations were obtained between the subjects' ACB scores and So scores (-.30), their RBS scores (-.29), and ROS scores (-.64). Significant positive correlation was obtained between the subjects' ACB scores and n Ach scores (.45) which was not in the predicted direction.

Results concerning n Ach suggest a hypothesis that both very low and very high n Ach are related to criminality. Significant relations between the subjects' ACB scores and So, n Ach, and emotional maladjustment scores are consistent with the hypothesis that psychological variables are significant sources of variance in criminality.

Problem

To validate further the Kvaraceus KD Proneness Verbal Scale.

Subjects

Negro boys (140) between the ages of 12-17 from Dayton, Ohio, public schools. There were 33 in the delinquent group, 56 in the random group, and 51 in the high-morale group.

Scope

The scale was administered to three already defined groups: delinquents, randomly chosen students, and high-morale students (i.e., those doing well scholastically).

Results and Conclusions

<table>
<thead>
<tr>
<th>Delinquency Score</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Delinquent</td>
</tr>
<tr>
<td>Positive</td>
<td>30%</td>
</tr>
<tr>
<td>Negative</td>
<td>69%</td>
</tr>
</tbody>
</table>

A positive score indicates delinquency proneness.

The differences between all three groups were significant (p < .01) as found by analysis of variance and t-test. The obtained Pearsonian Coefficients of correlation between score and age were:

NS for delinquency
P < .02 for PS
P < .01 for high-morale


Problem

To develop a personality assessment device which could successfully predict delinquent behavior.
Subjects

Males

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>$\bar{x}$ Score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control - rural</td>
<td>43</td>
<td>16.70</td>
<td>5.11</td>
</tr>
<tr>
<td>- urban</td>
<td>125</td>
<td>22.67</td>
<td>6.13</td>
</tr>
<tr>
<td>Delinquent (regular school)</td>
<td>19</td>
<td>28.95</td>
<td>6.87</td>
</tr>
<tr>
<td>Delinquent</td>
<td>243</td>
<td>30.40</td>
<td>6.20</td>
</tr>
<tr>
<td>Reformatory</td>
<td>698</td>
<td>29.83</td>
<td>6.65</td>
</tr>
</tbody>
</table>

Females

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Control - rural</td>
<td>44</td>
<td>16.20</td>
<td>4.80</td>
</tr>
<tr>
<td>- urban</td>
<td>134</td>
<td>18.85</td>
<td>6.23</td>
</tr>
<tr>
<td>Delinquent (regular school)</td>
<td>19</td>
<td>22.00</td>
<td>7.83</td>
</tr>
<tr>
<td>Reformatory</td>
<td>105</td>
<td>30.26</td>
<td>5.63</td>
</tr>
</tbody>
</table>

Scope

The role-taking theory was adopted and a pool of true-false type questions which fit the expected responses according to the theory were applied to a large sample. The most discriminative questions constituted the delinquency scale (De). Cross-validation was obtained by randomly selecting 42 items of the 64. They were administered to 1,092 incoming Army recruits at Fort Ord, California, and 99 stockade prisoners.

Results and Conclusions

On the original sample of 64 items the De scale was significant beyond the .01 level at discriminating between 906 male delinquents and 168 controls; and 124 female delinquents and 178 controls. Analysis of variance yielded F ratios of 62.5 for the male samples and 91.3 for the female samples.

Combining all delinquents and control cases for each sex separately permits identification of 75% of the delinquent subjects at a cost of only 23% "false positives" for the males, and 12% "false positives" for the females, using a cutting score of 28. A cutting score of 26 would correctly classify 78% of the total sample of 1430 cases.

On the cross-validation sample, an F ratio of 11.53 was obtained. This was significant beyond the .01 level. A cutting score of 17 was equivalent in the 42-item scale to the cutting score of 26 in the 64-item scale. Seventeen properly identified 66% and misclassified 22% of the controls. A cutting score of 18 would identify 60% and misclassify 16%.
Another study was conducted at Lackland Air Force Base, Texas. Stockade prisoners (353) were administered a 58-item scale (a cutting score of 24 was equivalent to 26); 64% scored 24 or above. The mean score for first offenders was 25.74, SD=6.55; the average for recidivists was 28.19, SD=7.03. The F ratio of the difference was 3.31, p<.01.

Forty subjects in an experiment at the Institute of Personality Assessment and Research at the University of California, Berkeley, were administered the De scale. The 10 highest and 10 lowest scorers were then assigned adjectives describing them by observers. Six observers rated, and at least two had to assign the same adjective to be considered significant.

High De scorers were typified by the following adjectives:

- Affected
- Anxious
- Defensive
- Dissatisfied
- Emotional

Low De scorers were typified by these adjectives:

- Calm
- Considerate
- Conventional
- Dependable
- Frank
- Good-natured
- Helpful
- Moderate

- Headstrong
- Rebellious
- Sensitive
- Tense
- Wary

- Modest
- Natural
- Obliging
- Patient
- Peaceable
- Tactful
- Unassuming
PART IV

ANNOTATED SUMMARY OF PREDICTION OF CIVILIAN PAROLE SUCCESS
Problem

To attempt to relate offense behavior of probationers to the social and personal data known about them, and to ascertain if the type of criminal activity itself is a reflection of the individual's problems and a key to his treatment needs.

Subjects

Male probationers (507), aged 17-20 years, from a sample collected between 1 October 1964 and 15 July 1965.

198 Larceny
167 Breaking and entering
19 Auto theft
57 Sex offenders
36 Acts of violence
30 Miscellaneous offenses

Scope

A total of 198 variables were studied, including: basic personal data, offense details/outcome, physical/mental health, criminal culture, material living standards, employment, social relationships, finances, and leisure time activities.

Results and Conclusions

Results in terms of offense:

1. Offenses of dishonesty
   (a) Larceny - 21% were neurotic
   (b) Breaking and entering - maternal overprotection occurred 47.4% of the time.

2. Taking and driving away (joy riding) - 65.4% were members of gangs (compared to a total group where 45.7% were members of gangs).

3. Crimes of violence
   (a) 52.8% performed criminal act alone (compared to a 36.1% rate for the total sample).
   (b) 65.6% lived in homes where there were one or more persons per room (the total sample averaged 47.2%)

4. Sex offenses - More often the sex offenders were mentally retarded, immature and emotionally disturbed. The sex offender was more often an integral part of the family, there was marked family cohesiveness in 75% of 16 cases checked (compared to family cohesiveness of 26.6% in the total sample).

Results in terms of recidivism

There were no significant differences between offense groups in terms of recidivism within 12 months of being placed on probation, 37% was the rate for the entire sample.

As far as probation population is concerned, there is little indication that offense categories are of value for classifying offenders with a view to studying treatment. The authors suggest a more fruitful approach would be to utilize personal characteristics in deciding on probation programs.


Problem

To relate situations, identifications and value orientations to parole outcome. To determine whether an interaction model is efficient in explaining parole outcome, the following hypothesis is stated:

Success rates are highest for parolees with:

(a) Favorable situations and high non-criminal identifications.
(b) Favorable situations and high non-criminal value orientations.
(c) High non-criminal identifications and value orientations.

Subjects

Recidivists (98) in the failure group (returned to prison for new crimes after parole release), and parolees (55) in the success group (with no further legal difficulty for a specified time period).

Scope

Situational variables pertaining to objective conditions experienced by the respondents during the parole period. Identification
variables pertaining to attitudes toward groups and behavior which suggest reference group support for non-criminal variables. Value orientation variables include traditional indicators of high recidivism rates and a scale of orientation to criminal means of goal attainment. In total, 83 variables were assessed, but the specific instruments were not listed.

Results and Conclusions

The data demonstrates a disproportionate increase in the criterion variable when a combination of attributes is found. The results indicate that an analytical technique accounting for effects if interaction can contribute significantly to predicting parole outcome.

Negative situation scores yielded a 77% failure on parole rate, whereas, positive situation scores had a 46% failure rate.

Negative identification scores yielded a 94% failure rate, and positive identification scores yielded a 42% failure rate.

Negative value orientation scores yielded an 87% failure on parole rate and positive scores yielded a 41% failure rate.


Problem

To investigate the personality characteristics of young adult offenders.

Subjects

Inmates (94) of Federal penitentiaries, and 120 comparison subjects.

Scope

The booklet form of the Minnesota Multiphasic Personality Inventory (MMPI) was administered to 94 inmates. These men had experienced educational and disciplinary difficulties. The comparison subjects were 120 literate male inmates with a sixth grade reading level or above.

Results and Conclusions

The results suggest that offenders (94 inmate group) were lacking in behavioral controls as well as displaying some serious mispercep-
tions and inappropriate emotional reactions to their surroundings. Examination of behavioral correlates and MMPI profiles is needed to plan specific treatment programs.


Problem

To determine a set of variables useful in the prediction of future recidivists in the population of prisoners serving first sentences.

Subjects

First sentence (438) and second sentence prisoners (242) from prisons at Birmingham, Bristol, Durham, Leeds, and Manchester, England, between October 1958 and June 1959.

Scope

This work was considered a pilot study. Information on 70 items divided into 15 areas was obtained from prison records and through personal interviews with the prisoners. Chi square was used to compare the distribution of scores for the two groups of subjects on subcategories of each item.

Results and Conclusions

First sentence (FS) group, primary recidivist (PR) = second sentence group. The following are the results in terms of differences:

A. Age this sentence -- ND

B. Social circumstances and behavior

1. Marital status -- ND
2. Marriage stability (PR most often broken)*
3. Cohabitation -- PR greater
4. Number of children -- ND
5. Effectiveness of contact with close relations (more FS have good contact)**
6. Effectiveness of contact with other relations and friends (most FS have good contact)***
7. Accommodation at time of arrest (more FS living with own family; married or parents)*
8. Satisfaction with accommodation -- ND
9. Religious affiliation -- ND
10. Religious observance in civil life -- ND
11. Wife's denomination -- ND
12. Drinking and gambling/serious gambling -- ND
13. Drinking and gambling in family (PR have somewhat more)

C. Family background

1. Parental composition of the home upon leaving school (PR more often had disrupted home)*
2. Death of parent during school days -- ND
3. Number of siblings -- ND (however, 35% of both groups had five or more versus 10% national average)
4. Father's occupational status (PR greater in lower classes, when divided by skilled versus semi-skilled versus unskilled)*
5. Happiness of childhood, as recalled (more often unhappy for PR)***
6. Causes of unhappiness (PR experienced more parental disharmony and economic problems, ND between unhappy men in each group)**
7. Prison experience in family (PR more often had among siblings)***
8. Mother's work during man's school life -- ND
9. Mother's age at man's birth -- ND

D. Education

1. Kind of school -- ND. Committed to Home Office approved school (more PR men committed)***
2. Age upon leaving school -- ND
3. Interruption of education by illness and/or truancy (truancy -- PR greater; illness -- ND)***
4. Convictions during school (PR greater, had at least one conviction)***

E. Employment

1. Occupational status (PR more unskilled as laborers; FS more skilled and white collar)***
2. Unemployment at time of offense (more PR unemployed)***
3. Longest period of employment (FS longer, 18 months or less versus 2-5 years versus over 5 years)**
4. Number of jobs held in previous five years (PR more jobs; used scale of 2 or less versus 3-8 versus 9 or more)***
5. Weekly income when last at work -- ND
6. Other earners contributing to household finances -- ND
7. Sufficiency of income -- ND
F. Military service

1. Type of engagement (PR more regular versus all other; unfit and exempt excluded)***
2. Summary of service (FS more completed satisfactorily)***
3. Service crime (PR higher, detention versus prison versus no record)***

G. Intelligence (used non-verbal, Ravens Progressive Matrices). FS versus PR -- ND (FS or PR versus general population both lower)***

H. Educational attainments

1. Reading comprehension (used Watts-Vernon Reading Comprehension Test) -- ND
2. Arithmetic test -- ND

I. Personality

1. Maudsley Personality Inventory
   a. Neuroticism (PR higher; both groups higher than non-criminal, but lower than diagnosed neurotics)**
   b. Extroversion -- ND between group versus general population
2. California Authoritarian Attitude Scale -- ND
   a. Authoritarianism or rigidity -- ND
   b. Acquiescence or compliance -- ND

J. Anthropometrical details

1. Height -- ND
2. Weight -- ND

K. Medical history -- Incapacitating illness resulting in permanent disability -- ND

L. Psychiatric history

1. Subnormality -- ND
2. Psychiatric disturbance -- ND
3. Subnormality in immediate (natural) family -- ND
4. Psychiatric disorder (including attempted suicide) in immediate family -- ND

M. Current conviction and sentence

1. Length of current sentence (1 month or less versus 3-6 months versus 1 year or over; FS more often in 1 month or less, PR more often in 1-6 months; ND - longer sentence)***
2. Nature of current offense
   a. Breaking and entering, larceny, fraud and false pretense versus all others (PR higher)**
   b. Breaking and entering and larceny versus all others (PR higher)***
   c. Sex offenses versus all others (FS higher)**
   d. Fraud versus all others (FS higher)**

3. Some features of current offense
   a. Accomplices -- ND
   b. Planning -- ND
   c. Involvement of drugs or alcohol -- ND

4. Disposal during period of awaiting sentence (more FS given bail)**

N. Criminal record

1. Age at first recorded conviction (PR, more men first convicted in adolescence)***

2. Number of previous convictions (PR higher, 1-3 versus 4 or more; groups were defined on the basis of serving a sentence, not on the basis of conviction)***

3. Nature of offenses comprising previous convictions
   a. Larceny versus all others (PR higher)***
   b. Violence versus all others (PR higher)***
   c. Breaking and entering (PR higher)***
   d. Sex offenses -- ND

4. Previous sentence
   a. Bound over on conditional discharges (PR higher)*
   b. Probation -- ND
   c. Fraud -- ND

5. Interval at risk after last sentence (period between last and present conviction; first offenders were omitted) (FS shorter, under 12 months versus five years, versus over five years)**

6. Civil offenses -- ND in number

7. Time spent in prison, op. remand, and/or as civil prisoner (PR, greater time, 0-4 weeks versus more than 4 weeks)***

Follow-Up Fall 1962:

1. Subsequent convictions (PR, more reconvicted, 67.3% versus 38.1%)***

2. First subsequent sentence (< .02 PR greater, imprisonment versus all other sentences)*

3. Differences between repeater and non-repeater
   a. Distinguished FS versus PR, but did not distinguish reconvicted from non-reconvicted within groups.
Recalls home as unhappy
Held longest job for short period
Served regular service engagement
Home disrupted while at school
Psychiatric history or marked symptoms
b. Distinguished FS (recidivist) from FS (non-recidivist), but did not distinguish FS from PR
Age-repeaters younger
Marital status - repeaters more often single

There are striking differences between first sentence men and primary recidivists. Most of the factors which distinguish FS and PR also distinguish FS (non-recidivists) and FS (recidivists). Few of the factors which distinguish FS and PR distinguish PR (non-recidivists) and PR (recidivists). The results lend support to the hypothesis that recidivism is correlated with isolation from society.

ND - no difference
*statistically significant at .05
**statistically significant at .01
***statistically significant at .001


Problem
To test the value of a modified base expectancy system in predicting satisfactory community adjustment of probationers and parolees.

Subjects
The records of 111 adult male Federal probationers and parolees were examined; 71 had been on probation and 40 had been on parole.

Scope
The modified California Department of Corrections Base Expectancy Scoring System was applied to the personnel records of 111 probationers and parolees (see Figure 2). The scatter was divided into three groups by probability of favorable parole. The statistical instrument used to analyze the data was a chi square.
### Characteristic

<table>
<thead>
<tr>
<th></th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Arrest-free period of five or more consecutive years</td>
<td>12</td>
</tr>
<tr>
<td>B. No history of opiate usage</td>
<td>9</td>
</tr>
<tr>
<td>C. Few jail commitments (none, one or two)</td>
<td>8</td>
</tr>
<tr>
<td>D. Most recent conviction or commitment does not involve checks, forgery or burglary</td>
<td>7</td>
</tr>
<tr>
<td>E. No family criminal record</td>
<td>6</td>
</tr>
<tr>
<td>F. No alcohol involvement</td>
<td>6</td>
</tr>
<tr>
<td>G. First arrest not for auto theft</td>
<td>5</td>
</tr>
<tr>
<td>H. Twelve months steady employment within one year prior to arraignment for present offense</td>
<td>6</td>
</tr>
<tr>
<td>I. Four to eleven months steady employment prior to arraignment for present offense. (If given 6 points on item H, add also 4 points for this item.)</td>
<td>4</td>
</tr>
<tr>
<td>J. No aliases</td>
<td>5</td>
</tr>
<tr>
<td>K. Favorable living arrangement</td>
<td>4</td>
</tr>
<tr>
<td>L. Few prior arrests (none, one or two)</td>
<td>4</td>
</tr>
</tbody>
</table>

**Sum of Points** 75

### Scale For Potential Adjustment

- **C** 00-36
- **B** 37-56
- **A** 57-76

**FIGURE 2. SCORING FORM**

### Results and Conclusions

Difference between the three groups was significant at the .01 level.

Fifty-five (of 111) scored between 57-76 (termed "A," least likely to violate); 99% made favorable adjustment. Forty-two scored between 37-56 ("B"); 35% made favorable adjustment. Fourteen scored between 17-36 ("C"); none of this group adjusted successfully. Nicholson suggest little or no supervision for group "A," entirely different programs for group "C," and more supervision of group "B".

Along with the study, the probation office in the Eastern District of California reviewed the literature for clinical criteria which would be helpful in prediction of who would be successful in
adjustment. The following represents their final selection of what they believe to be useful items:

1. The presence in the client of a healthy sense of conscience (embarrassment and discomfort) because of the offense that he has committed—or at least an objective assessment by the offender that his offense constituted a wrong.

2. The absence of indicators that the offender is potentially aggressive or violent.

3. Potential, if not actual, ability to tolerate and control anxieties and to circumscribe his "acting out."

4. A life position in which the offender feels contented with himself and his associates—or the desire to strive for such a position on the basis of thought and faith.

5. A life history that shows moderate ability to make adequate decisions and to estimate probabilities in the light of reality.

6. The ability and desire to attain satisfying and reasonable goals in life (however mediocre), along with the conviction that personal and social storms are not going to subside immediately.

7. A favorable recommendation for probation made by the officer that submitted the presentence report.


Problem

To examine the validity of subjective peer evaluation in predicting parole release and success.

Subjects

Eleven Borstal girls committed for offenses ranging from joy riding, amateur prostitution, burglary, and assault. The average age was 16.7 years, and average education was 1.2 years of secondary school.
Scope

The 'delinquent girls' rate who will be paroled after meeting together for 11 and 19 weeks. Those reconvicted after six months of release and those not reconvicted were then given the following: Minnesota Multiphasic Personality Inventory, 16 PF, IPAT Humour Test, Eysenck TR Scale, Raven's Progressive Matrices (1938), Criminal Attitude Scale (Taylor), and two Behaviour Rating Scales (Taylor).

Results and Conclusions

The correlations between the girls' lists and the parole board decisions were high; $r = .934$, $t = 7.599$, $p < .001$. This was not a factor of simply length of time at the institution as this correlated with the lists at only $r = .3$, $t < .1$.

The psychometric tests were given to 10 reconvicted girls (including four of the eleven making the list), and 23 not reconvicted (including the others seven from the list). None of the tests significantly discriminated the two groups.

Group parole prediction is not practical due to peer pressure, lack of cooperation, lack of responsibility, and not knowing the necessary information concerning post-release arrangements and rehabilitation.

The task of rehabilitation is to provide conditions to allow expression and reinforcement of acceptable standards. The girls already knew the values society would accept, but they needed help in rearranging their basic patterns of legal/moral/religious/social/psychological areas of guilt and control which ordered their lives. Many of the girls were profoundly influenced by people of integrity.


Problem

To determine what information concerning a potential parolee will aid in predicting his adjustment to society while on parole.

Subjects

Parolees (4,941) from Illinois state penitentiaries paroled between 1940 and 1945. Their total violation rate was 28%.
Scope

Factors were chosen for an experience table and were statistically matched to the record of the sample in terms of their favorableness or unfavorableness, to parole success. The factor had to be statistically significant in order to fall outside the neutral category. Potential parolees would be given a +1 for all favorable items and a -1 for all unfavorable items. The chances of success for the potential parolee could be determined from his total score.

Results and Conclusions

The sample was broken into 10 groups by scores, with violation rates ranging from three to seventy-five percent. The total parole period violation rates for the various score groups could be estimated with an average error of only two percent by revising the table each year so that the experience table reflected the latest group on parole.

Those factors found to be favorable to successful parole adjustment include the parolee:

- being sentenced for homicide or assault
- being sentenced for sex offenses
- having a definite sentence
- coming from a superior home
- being a first offender
- maintaining a very active family interest
- being an older, responsible, reliable citizen
- having been marginally delinquent
- having been a farmer
- having been socially inadequate
- having a regular work record
- having three or more associates in his crime
- having no gross defects of personality
- having a favorable psychiatric prognosis

Those factors found to be unfavorable to successful parole include the parolee:

- convicted for burglary
- having a history of recidivism
- having a history of habitual crime
- having no family interest
- having been a social floater
- having been socially maladjusted
- having been a drunkard
- having been a drug addict
- having been a transient
- having had an inadequate job on parole (this was the most significant factor of all; 65% of the recidivists had inadequate jobs on parole)
Problem

To critique prediction methodology and give an example of predictive attribute analyses.

Subjects

The records of 100 successful Canadian parolees and 100 unsuccessful parolees were examined.

Scope

The file of 200 Canadian parolees were examined. Of the 53 variables derived from the records, 13 were found with objectivity, reliability, efficiency and face validity. Chi square between successful and unsuccessful parolee variables was performed. Success was defined as at least two years without a violation.

Results and Conclusions

A summary of the critique of prediction models includes the following statements:

**Burgess Method.** Each factor counts one point; sum of points gives the measure of probability. "An example is Gough and Peterson (1952). The greatest disadvantage is the need to give each factor a weight commensurate with its individual predictive power.

**Glueck Method.** A modification of the Burgess Method. Each factor is given a weight equal to the percentage of offenders or delinquents in the sample who possess the attribute. It is not efficient because many items neither add nor detract from predictive power. Many items vary together, therefore, only one of them is needed.

**Linear Regression and Social Progression Models.** Calculates the predictive weight of each factor. An example is Männhein and Wilkins (1955). The greatest disadvantage is the concept of regression to the mean, in social life, regression effects may be outweighed by progression effects.

Grygier presents his example of Predictive Attribute Analysis. He believes one positive product of this analysis is that it makes allowance for treatment variables to effect the final disposition of individuals. In the previous models, the instruments could be admini-
stered at any time; they relied on the person's background to decide which group he was in. He admits this model is vulnerable to sampling errors.

In the high risk parolee group, intensive casework supervision was the best predictor of success \( (p < .01) \). In the low risk group, those with short sentences fared best \( (p < .001) \). A predictive efficiency of 90% is cited, but as a warning it should be noted that as the device is applied to samples moving away from an even 50-50 chance of success its accuracy declines. Grygier believes the device would best be administered at an individual's first appearance in court.


**Problem**

To assess the effectiveness of pre-sentence investigations in reducing recidivism.

**Subjects**

Two samples of 100 male offenders were drawn. Sample A consisted of offenders convicted between June 1959 and June 1961, and Sample B consisted of offenders convicted between September 1961 and September 1963.

**Scope**

The criterion of effectiveness chosen was whether the proportion of offenders subsequently reconvicted had fallen. Reconviction rates during two different periods were compared; one period covering a time when the Bench remanded for inquiries when they were felt to be needed, and the other period covering the Streatfield policy (to consider information from probation officers and other sources before passing sentence).

**Results and Conclusions**

The recidivism rate has not as yet been reduced. At least three hypotheses account for this:

1. Probation officers are attempting to include in their reports all the kinds of information which the Streatfield Report considered relevant to a sentencing decision; however, we may still be ignorant of the most efficient "indicators of the likelihood of penal treatment."
2. The relevant information is in the reports, but the bench does not know which information is relevant to which sentence.

3. It does not matter which sentence is chosen, i.e., for offenders with previous convictions, fines, detention center and probation might have similar reconviction rates.


Problem

To determine the feasibility of using the characteristics of offenders to predict criminal patterns.

Subjects

Offenders (364) convicted of burglary, 186 convicted of robbery, 53 convicted of forgery, 86 convicted of larceny, and 43 convicted of larceny of motor vehicles.

Scope

The case records of all men on parole in Pennsylvania between July 1 and December 31, 1969, who had not committed crimes against people were studied.

Results and Conclusions

Burglars were found most likely to repeat a crime and break their parole. Forgers are older and most likely to admit that their crimes are committed for personal gain. The forger has the longest criminal record, least unemployment, least accomplices and the lowest number of first offenders. Next to burglary, the forger has the highest rate of recidivism.

Larceny ties with forgery for the highest number of prior arrests. Larceny is high, along with burglary, in repetition of the same crime.

Larceny of motor vehicles involves the youngest and the greatest percentage of first offenders, the most unemployed, and the least likely to admit their crime was committed for personal gain. Jacks believes this group is the most likely to gain the greatest benefit from parole supervision.

Problem

To attempt to devise a method to predict successful parole.

Subjects

The recidivism rate of 156 Canadian prisoners was examined following 18-28 months of freedom.

Scope

Recidivists and non-recidivists were compared on the basis of the objective data obtained from their prison personnel records.

Results and Conclusions

Of the sample, 60.2% were recidivists. No significant differences were found between recidivists and non-recidivists for age, ethnic origin, education, or religion. The type of offense was not measured. No significance was found for institution, type of service, occupation, number of previous convictions, or marital status.

Figure 3 illustrates a prediction table using marriage, number of previous convictions, and job skills.

<table>
<thead>
<tr>
<th>Prediction Score</th>
<th>Percentage of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many Convictions</td>
<td>Few Convictions</td>
</tr>
<tr>
<td>Married</td>
<td>0</td>
</tr>
<tr>
<td>Unmarried</td>
<td>0</td>
</tr>
<tr>
<td>Skilled</td>
<td>4</td>
</tr>
<tr>
<td>Unskilled</td>
<td>2.5</td>
</tr>
</tbody>
</table>

FIGURE 3. PAROLE PREDICTION TABLE

The author believes it is very important for a man to perceive his skill as being marketable. Andrews believes stress of corrections should be on helping the individual develop the ability to form meaningful interpersonal relationships. He would like to see greater use of parole, smaller institutions, and half-way houses.
Problem

To study the post-release adjustment of inmates released from pre-release guidance centers in Detroit, Chicago, Los Angeles, and New York during FY 1964.

Subjects

Inmates (285) released from pre-release guidance centers.

Scope

After a follow-up period of two years, the results of a sample of 285 men were compared with the results of a 1961 base expectancy study.

Results and Conclusions

Of the 285 inmates, 153 were termed as "successes," 98 as "failures," and 54 as "in-program failures." Eliminating "in-program failures," 57.6% of the remaining 231 were "successes" and 42.4% were "failures."

A significant decrease in recidivism has been demonstrated for selective groups who successfully participated in the pre-release guidance center program.


Problem

To discover whether particular psychiatric features on diagnoses are associated with the likelihood of reconviction.

Subjects

Referrals (155) by courts for psychiatric reports.
Scope

The cases (155) were divided into three groups: exhibitionists, homosexuals, and property offenders, according to the nature of the current conviction leading to their examination. Information was sought which would test the following hypotheses concerning offenders referred to psychiatric clinics:

1. Offenders with past or present psychiatric abnormality have an increased likelihood of reconviction.

2. Offenders attending clinics for treatment have a decreased likelihood of reconviction.

Results and Conclusions

The results are consistent with the first hypothesis. Those with a history of psychiatric abnormality in themselves or their families have a somewhat increased tendency towards reconviction, but this is of limited significance in the prognosis of criminality. Attendance at the clinics is not shown to reduce the likelihood of reconviction.


Problem

To investigate the predictive effectiveness of three of the most common parole prediction devices on the same population.

Subjects

The initial sample included 183 violators and 261 non-violators, while the cross-validation sample included 130 violators and 165 non-violators.

Scope

Successful parole was defined as two years minimum without violation or new offense. Multiple-regression analysis was utilized for all possible combinations of the CPI, MMPI, and the California Youth Authority Base Expectancy Index (BE).

Results and Conclusions

The significant differences between violators and non-violators are listed below:
The "chance" prediction (that is, saying all will succeed) is 56%. By setting cutting scores of 49 and below on the MMPI, 48 and below on the CPI, and 35 and below on the BE Index, the percentages of "hits" were as follows:

- BE alone, 59%
- BE plus CPI, 63%
- BE plus MMPI, 60%
- BE plus CPI plus MMPI, 63%
- CPI alone, 60%
- MMPI alone, 55%
- CPI plus MMPI, 60%

The best combination might be: BE Index, the socialization, self-control, and community scales of the CPI with positive weightings, and the social presence scale of the CPI with a negative weighting.

To gain insight into the type of person high and low scorers might be, 100 men were studied for six days by 10 observers; after which the observers completed the Gough Adjective Checklist. The successful parolee is conscientious, moderate, not flamboyant, and perhaps, unduly subdued. The low scorer is narcissistic, restless, undercontrolled; too sure of himself, and quick to take offense. The authors conclude that the past, and the capacity to adapt to a determined and strictly regulated environment, seem to have the most importance in successful parole.

55. Ali, Badr-El-Din "Factors Determining Success or Failure of Parole in Six Major Studies," in Comparative Study of Two Types of Parole Violators, Columbus: Ohio State University, 1958.
Scope

Burgess' 1928 study of Illinois parolees, Vold's 1931 study of Minnesota parolees, the 1939 Attorney General's survey of release procedures, the Gluecks' 1943 study of Massachusetts parolees, Graham's 1946 study of Alabama parolees, and Ohlin's 1951 study of Illinois parolees were compared.

Results and Conclusions

The type of offense was a significant factor in five of the six studies.

Four of the six studies found the following items significant: community of offense, previous criminal record, marital status on parole, previous work record, and conduct record in prison.

Three of the six studies found these factors significant: number of associates, nature of sentence, length of sentence, parental and home status, criminal type, and social type.

In the six studies, 94 items were assessed and it appeared that 50 of these were at least at one time found significant in predicting success from failure in parole.
PART V

ANNOTATED SUMMARY OF MILITARY PREDICTION STUDIES
For persons unfamiliar with Army Corrections, a Flow-Chart of the legal process is included here.

FLOW-PROCESS OF LEGAL ACTION IN THE U.S. ARMY

1. ARREST
   - Stockade
     - Personnel Control Facility
     - Low Security
     - Medium Security
   - Quarters
   - Own Recognizance
   - Trial
     - Discharge
     - Release
     - Commutation
     - Not Guilty

2. STOCKADE
   - Personnel Control Facility
   - Light Security
   - Medium Security
   - Disciplinary Barracks, etc.
   - e.g., Correctional Training Facility
   - Return to Duty or Discharge
FORT KNOX STOCKADE

Prisoner Profile, March 1971

Average Age: 20.4
Education Level: 11.0
High School Graduate: 21.0%
Attended College: 2%
Completed College: 0%
RA: 62%
USL: 38%
Offense AWOL: 85%

Reasons for AWOL:
- Financial: 11%
- Domestic: 32%
- Medical: 8%
- Adjustment: 46%
- Other: 3%

Two or more offenses: 58%
Reconfined: 53%
Good Duty Time: 10 months

Marital Status:
- Single: 46%
- Married: 50%
- Divorced: 4%

Broken Home: 42%
Drugs: 34%

Data obtained by randomly sampling 100 files in March 1971. The results are a composite profile thought to be fairly representative of any stockade.
FORT KNOX STOCKADE

Prisoner Profile, October 1971

Average Age: 20

Education Level: 10th Grade

High School: 11%
Attended College: 1%
Completed College: 0

RA: 58%
US: 42%
AWOL: 91%

Reasons for AWOL:
- Financial: 39%
- Domestic: 32%
- Medical: 1%
- Adjustment: 22%

Recidivists: 41%
Reconfined: 67%

Good Duty Time: 6 months

Marital Status:
- Single: 49%
- Married: 42%
- Divorced: 9%

Broken Home: 34%
Drugs: 39%

Data obtained by randomly sampling 100 files in October 1971.
Problem

To discuss the Correctional Training Facility (CTF) at Fort Riley, Kansas.

Discussion

The objective of the CTF is to correct deviant behavior and return soldiers to duty with improved attitudes and motivation. Every year, 9,000 soldiers are processed through the CTF. It is classified as a Class II activity and its guidelines can be found in AR 109-19. CTF mission tasks include:

1. Intensive training
2. Close custodial supervision (CTF is a minimum physical restraint facility)
3. Correctional training
4. Removing soldiers from the CTF program

Training:

1. Military—consumes about 2/3 of total time spent at CTF
2. Motivational—consumes about 1/3 of total time spent at CTF

Profile of the Typical CTF Trainee:

1. Twenty-one years of age
2. 10th grade education
3. 73% Caucasian, 24% Black
4. 42% come from broken homes
5. 10.3% are Vietnam veterans
6. 62% draftees who enlisted in the Army (RA); 38% are draftees (US)
7. 20.5% are from PROJECT IQ0,000
8. 16% non-BCT, 25% BCT, 47% MOS/AIT qualified

Selection Criteria for CTF Trainees:

1. Physically fit
2. Free from character disorder
3. Seventy days to go on their sentence or forty days if they are BCT qualified
4. Must not have an approved administrative discharge
Those Who Cannot Be Selected:

1. Persons with a Bad Conduct or Dishonorable given to them at their court martial
2. Those in pre-trial confinement
3. Those with a psychotic condition or another serious character disorder

CTF gets shipments of new soldiers every Monday and Tuesday:

a. Usually gets about 350 per week from forts all over the U.S.
b. Gets about 150 from the rest of the world

The facility is organized into correctional units. These units are commanded by Infantry and MP officers. Each team has a CPT and three or four EM. These enlisted people are usually higher ranking NCO's such as E-6's and E-7's. This cadre team is in close contact with the trainees seven days a week and twenty-four hours a day. This team meets with the new trainees at reception time and attempts to identify individual problems. It works closely with the JAG office, chaplain's office and the social worker.

Training Aspects of the Mission:

1. Motivational emphasis on
   a. moral responsibility
   b. personal affairs
      (1) social adjustment
      (2) drugs
      (3) money management
   c. military adjustment
      (1) pay
      (2) allotments
      (3) types of discharges
      (4) drill and ceremonies
   d. education and learning
      (1) oral communication
      (2) education
      (3) economics
      (4) geography
      (5) principles of learning

Military Training and Retraining:

1. Weapons instruction
2. Physical training
3. Tactical training

CTF lasts nine weeks: First week, In-Processing; Second week, Third week, Motivational Training; Fourth week, All eight weeks, Military Training. Trainees after CTF get their duty assignments from CONARC when they graduate from CTF.
Research and Evaluation Division:

1. Conducts studies approved by DA in office of DesPer
2. Have published an AWOL Handbook for all commanders
3. Did follow-up study on CTF after its first 22 months of operation and found:
   a. 84% completed the program
   b. 47% were returned to active duty
   c. 10% were given Honorable Discharges
   d. Total of 57% considered rehabilitated by CTF staff

Professional Services Division:

1. Social Workers
2. Chaplains
3. Legal Branch

Seventh Step Program:

1. Motto — "Think Realistically"
2. Conducted by three ex-convicts
3. Small group counseling and individual counseling (when need for such is identified)
4. Works closely with the cadre of the correctional units and gives them feedback on particulars of certain trainees

No alcoholics at CTF; there are potential alcoholics at CTF. Before 1971, 92% of the trainees were there for AWOL. Since 1971, the regulations have been changed and those with offenses such as disrespect to an officer and assault and battery are admitted.

Time at CTF counts as bad time for the trainee.

Trustee System at CTF:

Those soldiers who are sent to CTF as trainees but who previously were high ranking NCO's (E-6's, 7's) are often put in charge of other trainees.

AWOL's now constitute 60% of CTF trainees.

Problem

To identify Army basic trainees who will perform delinquent acts or become AWOL.

Subjects

Trainees (1,195) in their first week of basic combat training.

Scope

Administered the Navy Delinquent Potential (DP) Scale, the Quay-Peterson Personal Opinion Survey and the Minnesota Multiphasic Personality Inventory Delinquency (De) Subscale at the beginning of the soldiers' career and obtained follow-ups in their behavior ten weeks later. Chi square and Kolmogorov-Smirnov analyses were conducted to compare the delinquent and non-delinquent scores. Multiple discriminant function analysis was conducted on a matched group of 68 delinquents and 67 non-delinquents.

Results and Conclusions

Forty-nine trainees went AWOL and twenty-two committed delinquent acts.

Delinquent behavior was found to be subsequently related to marital status of parents of trainees when young and parental discipline. Delinquents were subsequently younger, less educated, and scored lower on the Army General Classification Test.

A trainee who had a brother in the service was more likely to commit a delinquent act than one who did not.

Trainees who decided in advance to go AWOL admitted so on the questionnaire.

The Navy DP scale discriminated significantly between delinquents and nondelinquents.

Combining the variables resulted in a screening device that would correctly identify 79% of the AWOL's and 77% of the non-delinquents.
Problem

To predict those soldiers who will go AWOL in their present situation.

Scope

The Taylor-Johnson Temperament Analyses (T-JTA) was administered to a stockade population, to two companies and to a battalion. Those individuals who obtained a certain test profile were then counseled.

Results and Conclusions

A. Stockade Sample:

Chaplain Berbiglia was involved in counseling stockade prisoners. In using the T-JTA he noticed AWOL's exhibited a trait pattern. This involved scoring on a form on the following six traits:

- Highly nervous (70+%)  
- Highly depressive (80+%)  
- Not quiet (20-%)  
- Not inhibited (20-%)  
- Highly hostile (80+%)  
- Not impulsive (20-%)  

B. Pilot Study:

The T-JTA was administered to approximately 800 men processing into an artillery battalion. The first 214 men to score within the framework of the AWOL syndrome admitted to: argon, serious problems and considering AWOL. By administering the T-JTA and by providing counseling in an atmosphere of acceptance to the potential AWOL's, the AWOL rate dropped to 0 in four months and repeaters were reduced from 50% to less than 5%.

C. Company-Side Experiment:

Two companies were tested. The company commander of one company was informed of which men reflected the AWOL syndrome and the men were counseled. The company commander of the other company was asked to mark which men he believed would go AWOL but was not told of anyone's T-JTA scores. Twenty-seven men were identified in the experimental company and seventeen men were identified in the control company. The control company commander picked 28 potential AWOL's, only three of which were also picked by the T-JTA.
After three weeks the experiment was cancelled because it was felt that the contact deserved counseling. However, no one went AWOL after passing the T-JTA. None of the counseled experimental potential AWOL's went AWOL.

D. Battalion-Size Experiment:

The T-JTA was administered by NCO's to 808 men in an AIT battalion. Eighty-nine scored in the AWOL syndrome area. Forty-three percent of these said they were AWOL possibilities. Counseling was provided in one of the four battalions tested. This battalion had an AWOL rate one-half of that of the three control battalions.


Problem

To analyze the relationship between background data, attitude toward the Army, rehabilitation, degree of social interaction, and post release performance.

Scope

Military inmates were followed from their initial stage of rehabilitation to 60 days after return to duty. Background information was taken from military records; attitudes from a 31-item questionnaire; and measures of social interaction were obtained from the last three questions of the attitude questionnaire. The analytical technique was not given.

Results and Conclusions

Statistical analysis was not given.

Few soldiers without a military occupation specialty (MOS) were successfully restored. Non-whites succeeded at a higher rate than whites. Those with less than a high school education were more often successful than high school graduates. Previous military conviction more often correlated with poor adjustment than previous civilian convictions. There was a positive relationship between attitude toward the Army and performance. No relationship was found between attitude toward rehabilitation and performance. The inmates with higher rates of social interaction had less successful release performance.

An even chance for successful return to duty was given to those soldiers who (a) acquired an MOS in rehabilitation, (b) denied civilian criminality, and (c) were deemed social isolates by the interaction index.

Problem

To determine the relationship of anomia to the socialization of prisoners at the Army Correctional Training Facility (CTF) at Fort Riley, Kansas. General information mentioned by Habeck included: at any given time the stockade population is approximately one-half of one percent of the total military population. Eighty percent of the stockade population are in for AWOL.

Subjects

Men (183) confined to the CTF at Fort Riley, Kansas:

Scope

Habeck adopted Durkheim's hypothesis that anomia leads to deviant behavior; therefore, the less the anomia, the greater the possibility for successful resocialization. Anomia was measured with the Srole Anomia Scale which has five items, each with five possible answers.

Socialization was measured by a scale constructed by Lanier in his 1968 Case Western Reserve doctoral dissertation, "Personal Demoralization and the Socialization of Military Trainees." This scale has eight items, each with four possible answers.

The scales were administered at the beginning and end of the eight-week CTF program.

Results and Conclusions

The average age of the retrainees was 21. The average years of school attended was 10. Seventy-four percent had not completed high school, while in the Army at large, 57% are high school graduates. Eighty-five percent were in Mental Groups III and IV as measured by the Armed Forces Qualification Test. Twenty-five percent were married. Forty-eight percent had parents who were living together, while 40% had not lived with both natural parents from birth through age 16. Twenty-four percent were Negro, while nine percent of the total Army is Negro. Fifty-eight percent were regular Army enlistees. The average length of time in service was nine months. Forty-one percent had prior court martial offenses against them. Ninety percent were in the CTF for AWOL.

Anomia was significantly (p .01) correlated with socialization and final disposition. Socialization was significantly correlated with team leader rating and final disposition, while race was not corre-
lated to either. Socioeconomic status was not significantly correlated to any of the variables. Education was significantly (p < .05) correlated to anomia.


Problem

To investigate the efficiency of written instruments in predicting potential military offenders.

Subjects

Men (1,999) tested at the Army reception station were followed-up after 16 weeks of service and classified as offenders (6%) or non-offenders (94%).

Scope

Three measures drawn from the Personal Opinion Study (University of Illinois), which is a personality questionnaire, and an Overall Acceptability Measure, developed as a disciplinary record predictor at this organization in 1958, were used. Phi or point biserial coefficients of the experimental predictors were computed.

Results and Conclusions.

The Overall Acceptability Measure, which deals with background information, was the most effective instrument in identifying potential offenders. When a cutting score was set which identified six percent of all tested men as potential offenders, sixteen percent of the actual potential offenders were identified, and eighty-four percent of the six percent were non-offenders labelled as potential offenders. Multiple correlation coefficients for all of the predictor variables were judged too low to be of any use.

A subsample of 429 Armed Forces Qualification Test Category IV men who had not graduated from high school was derived from the total sample and the predictor variables were still judged as no more useful than in the total sample.

Due to the heavy cost in terms of false positives, it is concluded that efforts to predict military effectiveness on the basis of an individual's characteristics on entry into military service should be discouraged.
Problem

To determine the relationship between educational level and outcome in service.

Subjects

Men (367) with a history of juvenile delinquency; 522 men randomly selected from a cross section of the population from the same area; and 2,564 men from a Minnesota delinquent sample.

Scope

A Minnesota sample reported previously was used along with two samples which were obtained in another state. Tables and graphs represented the relation between educational level and: (a) acceptance or moral rejection for service, and (b) outcome in the military service; comparing the two new samples with each other and with the Minnesota delinquent sample.

Results and Conclusions

This study confirmed the results of the preceding report which indicated that among delinquents there was a consistent rise in the proportion of those successful in service with an increase in educational level. In both states, high school graduation and college attendance tended to override an earlier history of delinquency. The suggestion was made that educational level could be incorporated with the delinquency record in a way which is not formally provided for in the evaluation of individuals with histories of delinquency.


Problem

To obtain trainee evaluations of the Correctional Training Facility (CTF) program and their perceptions of the AWOL problem.
Subjects

Ninety-seven soldiers confined to the 6th Correctional Training Facility (CTF), Fort Riley, Kansas, during November 1969.

Scope

To gather information regarding their reasons for and against their offenses, their perceptions of the CTF program, their expectations regarding discharge, and their evaluations of CTF as compared to their experience in the stockade, questionnaires were administered to trainees leaving the facility.

Results and Conclusions

The authors recommend that: (1) consequences of military delinquency continue to be emphasized to the trainees (they must realize that AWOL is only a temporary relief from a bad situation and is ultimately a poor choice); (2) carefully selected types of offenders be allowed to enter the CTF program (individuals with poor restorative potential can have a negative effect on the others); and (3) individuals should be taught to respond to stress in a rational manner.

The trainees indicated a positive evaluation of the total CTF program; they felt CTF was helpful to them in returning to the Army and to civilian life.


Problem

To develop a paper-and-pencil questionnaire to identify potential disciplinary risks.

Subjects

The Background and Opinion Questionnaire (BOQ) was administered to 4,000 men undergoing initial processing in March 1967.

Scope

Four sets of scored items and 18 filler items were decided on as having the greatest potential. They included:
1. Background and opinion (22 items) from Personal History Form OA-1 (of BESRL); multiple choice items phrased in the third person.

2. Personal opinion study (from Quay and Peterson).
   a. Psychopathic delinquency (45 items)
   b. Neurotic delinquency (30 items)
   c. Sub-cultural delinquency (25 items)

3. Unscored filler items (18) had to be inserted because of the use of the Digitek answer sheets.

Results and Conclusions

No results are given.


Problem

To give military norms for the Socialization (So) scale of the California Psychological Inventory (CPI) between January and July 1961.

Subjects

The sample included five groups of subjects: (1) 261 RFA Army Reserve Inductees, mean age 21.2 years, range 17-26; (2) 277 RA regular Army enlisted inductees, average age 19.9 years, range 17-26; (3) 244 US draftee inductees, average age 21.3 years, range 17-26; (4) 303 SP stockade prisoners, average age 20.2 years, range 17-26; and (5) 40 SP stockade prisoners, average age 33.3 years, range 27-49.

Scope

The purpose of the test was not given to the subjects. It was administered with the regular Army battery to inductees and during the initial processing period to stockade prisoners. The subjects had to give their names and other identifying information.

Results and Conclusions

All results corresponded very well with the standardization norms and with a similar study done in 1952 at Fort Ord which yielded a Gough Standardization \( r_{bis} = .73 \). The present study yielded
rbis = .77 (reached by calling the inductee group "socialized" and the stockade group "less socialized"). The author suggests using a cutting score of 23 which would one percent of the recruits, yet filter out 33% of future stockade prisoners.


Problem

To check the subsequent adjustment of men given psychiatric screening at Fort Sill after their first court martial.

Subjects

Sixty-four men were referred by their commanding officers. Six months had elapsed since their first screening. Follow-up letters were sent out and records on 60 men were returned. Due to the loss of records, only 37 of the 60 had the individual history checklist in their records.

Scope

A checklist data sheet with 15 arbitrary indications of social, personal, and familial instability was administered by mental hygiene consultants to men who had received one court martial.

Results and Conclusions

Of the 60 soldiers whose records were returned, 23% had received discharges for unsuitability or undesirability (unsatisfactory UA group). Fifteen percent were awaiting another court martial or general discharge (borderline BA group). Sixty-two percent had made a suitable adjustment (SA). The sample is too small for analysis, yet some trends are apparent. On the 15-item screening list:

- UA group had mean score of 4.8 instability items
- BA group had mean score of 3.4
- SA group had mean score of 2.2

No specific items differentiated. The most important trend was whether the individual verbalized a desire to stay in the service.

The types of items included in the 15-item checklist are as follows:
1. Parental delinquency
2. Parental alcoholism
3. Parental divorce or separation
4. Parental psychiatric illness
5. Subject's high school history
6. Subject's previous psychiatric treatment
7. Subject's history of alcoholism
8. Subject's indebtedness
9. Subject's history of unusual traffic violations
10. Subject's marital status
11. Subject's police record
12. Frequent sick call
13. Previous non-judicial punishment
14. Poor motivation
15. Attitude toward the service

The results suggest the rate of administrative discharge for release of first offenders is significantly higher than in the general military population. This indicates a definite need for a screening program for first offenders. The author suggests that instead of looking for specific historical items for predicting future adjustment, the examiner might be more effective by determining if the subject has a past history of multiple indications of instability.


Problem

To determine the feasibility of using the Minnesota Multiphasic Personality Inventory (MMPI) as a screening test to identify character disorders in men.

Subjects

Twenty-five enlisted men awaiting administrative separation; 30 men awaiting court martial; and 35 men who had just received a second Article 15. All had been tested within a three-month period.

Scope

The scores from the MMPI of all subjects were averaged to achieve a profile of three groups of offenders.

Results and Conclusions

The subjects did not differ significantly with relation to age or education.
All three curves assumed the form associated with psychopathic personality.

Pd was the highest score in all three groups.

Correct ranking (separation group having the highest scores, court martial group next highest, and Article 15 least highest) was obtained on seven of ten scales, with two of the misses (mf and s) generally regarded as the weakest scale on the test.

Sc was elevated for all three groups. This was not expected and is being pursued in a study following this one.

Standard deviations allow considerable overlap.


Problem

To ascertain some background data from prisoners at the U.S. Army Provost Marshal Rehabilitation Center to assist in determining decisions concerning future military disposition.

Subjects

Men (543) incarcerated for one to six months at the rehabilitation center for disciplinary reasons (usually breaking Army regulations). Twenty-five percent of the total prison population were Negro.

Scope

Information was obtained from the subjects' personnel records and compiled.

Results and Conclusions

1. Number of previous civilian convictions -- 2 or more 12.5% -- 1 18.0%

2. Number of previous military convictions -- 3 or more 37.2% -- 2 45.2% -- 1 27.6%

3. Of the total population, 93.9% were regular Army, 6.0% were draftees.

4. Of the total population, 30.8% were first born or only child, 16.2% were second sibling, 5.5% were next to last, and 12.5% were last born.
5. Parental home was broken before the subject reached the age of 15:

<table>
<thead>
<tr>
<th>Percentage of broken homes</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divorce</td>
<td>51.2</td>
</tr>
<tr>
<td>Father deceased</td>
<td>23.6</td>
</tr>
<tr>
<td>Mother deceased</td>
<td>18.3</td>
</tr>
<tr>
<td>Orphanage or unknown</td>
<td>6.3</td>
</tr>
<tr>
<td>Home not disrupted</td>
<td></td>
</tr>
</tbody>
</table>

6. Ninety percent came from what a psychiatrist termed an "inadequate" home (alcoholism, inconsistency, etc.).

7. Subjects' fathers (19.2%) had jobs which would be expected to be held in high esteem, and were of comparatively high income; 37.9% of the fathers were "factory workers;" 30.2% of the fathers were "other laborers."

8. Age: $\bar{x} = 20.5$ years, range 16-44 years
   Education: $\bar{x} = 9.7$ years, range 4-18 years

9. Psychodiagnosis yielded:
   - character disorders (40.1%)
   - psychiatric diagnosis other than character disorders (4.0%)
   - no diagnosis (55.9%)


Problem

To survey the factors that cause delinquency, especially AWOL, in the military service.

Subjects

Men (616) confined to the stockade at each of six posts in the First and Second Army areas, and 1,216 men in regular duty status were measured. Personal interviews were conducted with 299 of the above sample.
Scope

Enlisted men on regular-duty and in stockades from six Army posts were given questionnaires or personnel interviews. The questionnaire covered: background information, military experience, social attitudes, personality variables, prison experiences and attitudes. Chi square was the instrument of analysis.

Results and Conclusions

The delinquents differed from the non-delinquents in the following background variables:

- Delinquents generally had less education and were younger.
- Delinquents more often came from poorer and less socially advantageous background.
- Delinquents' parents were more often absent from the home while the subject was growing up.
- Delinquents more often had unfavorable reactions to their families; however, both groups indicated having the same discipline.
- Delinquents more often stated they had not been in with a group of boys during adolescence.
- Delinquents far more often had committed civilian delinquency.

The delinquents were characterized by the following personality traits:

- Aggressive behavior, e.g., quick to anger or being unpleasant to people they do not like.
- Escapist tendencies, e.g., frequent drunkeness, sick calls, job changes.
- Lack of long-range goals, e.g., do not save money, broke day after payday.

The following Army situations appear to be related to delinquency:

- Men in transition (i.e., between assignments or commands) were more likely to go AWOL than men in regular units.
Delinquents more often planned upon entrance into the Army to make it a career.

A contributing factor for some AWOL soldiers was avoidance of combat duty.

A majority of both delinquents and non-delinquents felt that few of their officers or noncoms took any personal interest in the men. This perceived lack of interest was thought to possibly be a contributory factor to AWOL. It was found that delinquents had a very difficult time in effectively utilizing official channels, especially the company commander, for solving family problems.

Apparently, delinquent and non-delinquent men are uncritical of the AWOL offender. Therefore, there is little social pressure against AWOL behavior.


**Problem**

To determine if prediction by a division psychiatrist is of any value in determining the future performance of "problem soldiers."

**Subjects**

Five hundred and fifty-one questionnaires were sent out, 336 were returned. Recommendations to continue on duty had been made up on 273, 63 had been recommended for administrative discharge.

**Scope**

A questionnaire was sent to the Unit Commander of every man seen by the division psychiatrist between 1 February 1951 and 1 February 1952. All subjects had been seen at least three months prior to the questionnaire.

**Results and Conclusions**

The 273 subjects recommended for continuance of duty received an average rating of 7.8. The 63 subjects recommended for administrative discharge received an average rating of 5.4. The average score was about 7.

Recommendation for continuance of duty or discharge hinged on:

1) soldier's current degree of efficiency,
2) past military adjustment,
3) life-long pattern of adjustment,
4) degree of precipitating stress,
5) poor motivation or statement of inability or unwillingness to perform his duty were only considered in relation to other criteria,
(6) Physical profile changes and recommendations for limited duty were not used because of the administrative problems they involved.

The author concludes that the division psychiatrist can be potentially more accurate in predicting adjustment than a psychiatrist at a hospital because of his closer relationship between the referring physician and the Unit Commander.


Problem

To examine the subsequent military careers of those predicted either successful or those deemed questionable by a brief psychiatric screening at the Fort Snelling induction center between January and April 1941.

Subjects

Five hundred men from the Fort Snelling induction center.

Scope

Selected 250 men for whom successful military careers had been predicted and 250 men who were deemed questionable. In 1946, the records for 304 of the 500 were obtained and examined.

The following categories of adjustment were established:

1. Successful soldier -- absence of disciplinary action, minimal hospitalization, 2 or 3: NCO or Tech 4; 3+ battle stars; individual awards.

2. Average adjustment -- contributed more than Army paid for him. Minimal disciplinary action, initial psychiatric symptoms after 2+ years; men discharged for other than psychiatric disorders or wounds.

3. Failures -- administrative discharges, psychiatric symptoms before two years of service, court martials, long hospitalizations.

Results and Conclusions

Four times as many failures were from the questionable group. Over twice as many successful men were from the successful group.
However, from the questionable group, for every two men who proved to be failures, there were three who became successful. Almost three times as many psychiatric casualties came from the questionable group. Twenty-one percent of the questionable group were failures. Five percent of the successful group were failures.

The author concludes that at the induction center only initial screening can be effectively achieved; much more effective screening can be achieved in the training center utilizing commissioned and non-commissioned officers trained in the fundamentals of mental hygiene.


Problem

To predict soldiers at the Army Special Training Unit at Camp Atterbury, Indiana, who would go AWOL early in their military career.

Subjects

Fifty AWOL's who had been gone for more than one day for other than accidental reasons, and 50 non-AWOL's who had completed four to twelve weeks of reading, writing, arithmetic, and pre-basic training instruction.

Scope

Each soldier was interviewed by a personnel consultant assistant and later reinterviewed by a personnel consultant. Information was gathered from the soldier's instructors, progress reports, medical, court and classification records. A social case history was also gathered by the American Red Cross. The subjects were then rated on a 185-item multiple choice and Yes/No item rating scale. The Kelly technique was used to select items with the highest discriminatory value (Long and Standiford, 1935).

Factors kept constant in the two groups were: age, training, company, size of community where they had lived longest, rate of learning ability, marital status, and religion.

Results and Conclusions

A 26-item prognostic scale was obtained. Significant answers for each item carried a weight of 1, so there was a possible score of 26. AWOL's averaged 7.9, with a range of 1-15. Non-AWOL's averaged 1.5, with a range of 0-5. The standard error of the difference was .54.
Outstanding findings include:

'Six of seven trainees under the age of 18 went AWOL.
Forty percent of the AWOL's versus eight percent of the non-AWOL's were "troublemakers" in school.
Forty-eight percent of the AWOL's versus eighteen percent of the non-AWOL's expressed concern for their parents' health.
Seventy percent of the AWOL's had previous criminal records.
Forty percent of the AWOL's versus two percent of the non-AWOL's were drunk more than once a week.
Sixty-four percent of the AWOL's versus twenty percent of the non-AWOL's stated they had more than one sexual partner per week.
Fifty-seven percent of the AWOL's versus twenty-four percent of the non-AWOL's stated they had unsuccessful marriages.


Problem

To evaluate the Armed Forces Qualification Test (AFQT) and selected biographical variables in terms of their usefulness in predicting military effectiveness.

Subjects

The validation study included 1,633 sailors and the cross-validation study numbered 1,614.

Scope

The predictor variables used were 13 personal history characteristics and the AFQT scores obtained upon entrance into the service. There were five interim measures; four were gathered after two years. These included: officers' rating of adjustment, disciplinary or commendatory record, pay grade achieved, and average semi-annual marks. The fifth was obtained after four years, based on whether the sailor was recommended for reenlistment. Correlations were computed between the variables, and linear regression analyses were used to obtain the best variable combinations for prediction.
Results and Conclusions

The AFQT was significantly related to all five criterion measures, but was the best predictor for only one -- pay grade achieved. Educational achievement was the best overall predictor.

The following predictors were found to be significant (all at the .001 level) for predicting disciplinary records:

- Education
- Expulsion from school
- Family stability
- Race
- Active duty obligation

In terms of four year effectiveness (recommended for reenlistment), the following predictors were significant (all at the .001 level):

- Education
- Expulsion from school
- Family stability
- AFQT


Problem

To explore the relationships between biographical information input and clinical evaluations output in an assessment program designed to select men for unusual and potentially hazardous assignments.

Subjects

Fourteen experienced clinicians who served as examiners for the U.S. Antarctic Research Program and in this capacity evaluated naval and civilian candidates for Antarctic scientific expeditions.

Scope

Two professional groups, psychologists and psychiatrists, and two examining methods, Rorschach and interview, were compared with respect to the relationships between biographical questionnaire data and clinical evaluation scores.

Results and Conclusions

Consistency among individual clinicians in their apparent utilization of 23 items of biographical information was revealed by the
multiple regression technique. Rank or experience consistently contributed to prediction of the clinicians' evaluations.

Problem

To evaluate the effectiveness of the Cornell Medical Index (CMI) in discriminating between healthy and maladjusted groups within the naval population.

Subjects

Psychiatric patients (294) and control subjects (148).

Scope

The CMI was administered to a previously diagnosed sample.

Results and Conclusions

The results indicated that the CMI has substantial validity as an indicator of emotional ill-health among Navy personnel and supported its value as a psychiatric screening device and an epidemiological tool. An additional finding was that CMI scores significantly predict attrition from an extremely rigorous training program. A further study of demographic and situational factors that may affect CMI scores is necessary.

Problem

To test the significance of differences between values held by those naval personnel with a record of disciplinary offenses and those with no record.

Subjects

Thirty-six offenders and 46 nonoffenders. Descriptive data concerning the total sample includes: mean age, 19.9 years, range 17-25; average educational level, 9.5 years, range 7-11 years; average
General Classification/Test (GCT) scores, 44.7, range 30-58; and average length of service, 32.1 months, range 7-74 months.

Scope

The instruments used to obtain a measurement were the California Psychological Inventory (CPI), Socialization (So) scale and the DF Opinion Survey (Survey of Interpersonal Values, SIV). The statistical treatment included the analysis of covariance between offenders and nonoffenders and correlation of the scales of all tests.

Results and Conclusions

Naval offenders were seen as having a greater need for attention, adventure, and freedom. Value dimensions of the SIV show the offender placing less importance on conformity and greater importance on independence.

The author believes the importance of this study is that it suggests that an attitude of escapism (DF scale) combined with nonconformist attitudes (SIV) can differentiate, given a group where all of the sample are potential delinquents (e.g., lower education, lower GCT scores).

Problem

To determine whether personality scales measuring social maturity and conformity are related to delinquency rate.

Subjects

White, male confinees (100) of the Navy Brig, Marine Corps Barracks, San Diego. The average age was 20.3 years, range 17-31 years. The average educational level was 9.8 years, range 7-13 years. The average length of time in service was 26.3 months, range 7-67 months.

Scope

The Survey of Interpersonal Values (SIV) and the Socialization (So) scale of the California Psychological Inventory (CPI) were administered to a group during their first week in a Navy brig. Correlations were obtained between these and General Classification Test (GCT), educational level, length of service, and number of prior offenses.
Results and Conclusions

1. The conformity scale of the SIV compared with "delinquent" groups found in earlier studies (Gordon, 1961). Low scores were associated with delinquency.

2. The So scale of the CPI was also low and compared with other reported delinquency groups (Gough, 1960).

3. The mean GCT score and educational level were not significantly below an unsel ected Navy population.

4. The educational level was significantly (.05) related to the number of prior offenses.

5. The author called the score from the So and conformity scales "social maturity" and suggested those who score low are more likely to have a higher offense record in the service.


Problem

To examine the relationships of attitudes toward body and self to past experience and present adjustment, and to investigate the factor structure of the body and self-cathexis scales and to determine whether a more meaningful differentiation of attitudes toward self might be achieved.

Subjects

The tests and questionnaires were administered to 443 Navy enlisted men with a mean age of 18.9 years; mean educational level of 11.1 years; and mean intelligence scores of 52.2. Their total length of service averaged 16.8 months.

Scope

Relationships were measured by the use of the Self-Evaluation Index (SET); 22 body-cathexis items, 30 self-cathexis items, 26 biographical items, and 135 attitude inventory items. In addition to the SET, the Inventory of Personal Opinions, consisting of 135 items that had previously discriminated more effective from less effective Navy personnel, was administered.
Results and Conclusions

Self-evaluation measures correlated significantly with a composite of biographical information reflecting family instability and conflict, inconsistent or extreme disciplinary practices by parents, and persistent difficulties in school adjustment.

Factor analysis of the self-evaluation inventory yielded eight factors which provided a more meaningful differentiation of attitudes toward self than the global measures of "body-cathexis" and "self-cathexis" used previously.

The self-evaluation measures correlated in the expected direction with attitude measures of interpersonal maturity and delinquency proneness, positive self-regard being positively related to the maturity scale and negatively correlated with the delinquency scale.

With the exception of work attitude, the self-evaluation measures did not correlate significantly with any of four military adjustment criteria. It was inferred that the relationships of these self-evaluation measures to adjustment are probably of a low order in normal population and are not simple linear relationships.


Problem

To determine whether adaptation to naval service can be efficiently predicted.

Subjects

Seven hundred and forty-three (743) subjects from an aircraft carrier, average age, 18.9 years; average educational level, 11.1 years; average GCT score, 52.2. Length of service average 16.8 months, range 3-44 months. Ninety-four percent were from pay grades 2 and 3.

Scope

The biographical interview format, using many items from the 1959 Glueck and Glueck study, was administered in questionnaire form. Adaptation to naval service covered four areas: (1) disciplinary offense record, (2) military proficiency rating, (3) military conduct rating, and (4) medical record.
Biographical items reflecting persistent difficulties in school adjustment, lax or erratic discipline by father, discipline by a person other than the father, and lack of family cohesiveness or stability were significantly related to one or more of the adjustment criteria.

All subjects low in enlistment age (17), having more than 18 months in education (non-high school graduate), and GCT scores (below 50) were selected for study. This group totalled 63 enlisted men. Of the subgroup, 35.5% had delinquency histories. Of the 39 enlisted men scoring over five items on the checklist, 66.7% were offenders. Of the 24 scoring less than five, only 37.5% were offenders. Of the 35 offenders in this sample, 74.3% had a score of over five.

The differences between offenders and non-offenders in the subgroup were significant beyond the .03 level of confidence.

In addition, two other tests were given: (1) Self-Evaluation Index (Secord and Jourard, 1953) which involves 52 items referring to body or self concepts, using a five-point scale in terms of the subject's satisfaction with particular aspects of self; and (2) Inventory of Personal Opinions (Gunderson, 1960) which is a 135-item True/False inventory which discriminates more effective from less effective Navy personnel. Two scores were derived; one to reflect delinquent attitudes, and one to reflect immature attitudes. A combination of correlational and chi square techniques were employed for analysis.

Results and Conclusions

The factors found to be significantly related to military offenses were: age, enlistment age, naval job (MOS), education, GCT score, delinquent attitudes, maturity, grade failed, trouble with teachers (.01), truancy, discipline by father (.001), who he turns to when in trouble (.01), parents separated (.01), and parents divorced (.001).


Problems

To investigate the characteristics of Navy recruits who prove to be non-conformists.

Subjects

Twenty thousand recruits at the San Diego Training Center between January 1954 and November 1954.
Scope

In 1957 records of the 20,000 subjects were checked and the following subsamples were defined: (1) control group, 882; (2) prison population, 62; (3) prison commitment, 117; (4) deserters, 52; (5) bad conduct discharges, 91; (6) unsuitable discharges for psychiatric reasons, 307; (7) unsuitable discharges for "good" reasons, 16; (8) undesirable discharges, 129; (9) court martial offenders with no confinement, 56; (10) medical discharges for psychiatric reasons, 134; (11) minor offenders, 161; and (12) absentees, 94.

The relationships between a non-offender control group and various offender groups were analyzed, using Mahalanbis' generalized distance function (D2). Data on age, educational level, General Classification Test (GCT), and Armed Forces Qualification Test (AFQT) were used.

The D2's were computed from the reciprocal of the variance-covariance matrix of the variables (the universe dispersion matrix) and the differences between the means of the five variables for each pair of groups. (The Delinquency Potential Scale was the fifth variable.)

Rao's 1952 canonical analysis was applied to determine if more than single dimensions were involved in the variation among the groups.

Results and Conclusions

The first canonical variate accounted for 90% of the variation among groups. The second root absorbed 3.4%. Therefore, one dimension handles almost all of the variance.

Six non-conformist groups cluster at one extreme end (unsuitable discharge for sufficient reasons; deserters, bad conduct discharges, unsuitable discharge for psychiatric reasons, prison commitments and prison population). Four groups cluster in an intermediate position (absentees, medical discharge for psychiatric reasons, minor offenders, and court martial offenders).

The undesirable discharge group overlaps both clusters. Non-offenders are at the other extreme.


Problem

To predict delinquency and recidivism, and to judge the effectiveness of a closed living group treatment rehabilitation treatment.
Subjects

Confined and non-confined naval personnel.

Discussion

Following are some of the highlights of a long term project conducted by the Navy from 1952-1959:

**Prediction of Delinquency Inventory.** True/false items, taken mostly from the Minnesota Multiphasic Personality Inventory (MMPI) and the California Psychological Inventory (CPI), were administered to a sample of confined and non-confined naval personnel. Items were retained which discriminated between the two groups at the .05 level of confidence. The result, after two further item analyses, was a set of 119 items called the Delinquency Scale, with a reliability coefficient of around .90 and a concurrent validity coefficient of .70. The follow-up period on the sample was three years.

**Recidivism Prediction Inventory.** The same item pool was utilized; the scale items chosen were the ones which differentiated at the .05 level of confidence between the men released from the stockade who were future offenders and those who were not. As in the first scale, items which did not retain the .05 level of confidence in successive samples were dropped out. After cross-validation, the distributions indicated that a 47-item scale could restore 50% of the confinees to duty with 85% success.

**Rehabilitation Project.** A theory of delinquent behavior was formulated early in the research program, and from that rationale, an interview schedule measuring interpersonal maturity was devised. The theory postulated six stages of interpersonal maturity, beginning at birth:

1. Integration of separateness involves discrimination of self and non-self.
2. Integration of non-self differences -- individual finds specific characteristics in persons and objects.
3. Integration of rules -- includes perception of rules.
4. Integration of conflict and response -- perceives influence and psychological force of others.
5. Integration of continuity -- perceives stable action patterns in self and others.
6. Integration of relativity, movement, and change -- perceives integrating processes in self and others.

The research team believes levels two through five are represented in the military delinquent population.
Five hundred and fifty (550) military prisoners were evaluated according to the interview schedule and placed in groups of 20, determined by their level of maturity; low-maturity groups contained individuals at stages two and three; stages four and five constituted high maturity subjects. Three Marine sergeants were assigned to each group and the sergeant teams were judged on their maturity and flexibility and placed in three categories. The groups retrained for six or nine weeks with great efforts made to allow no interpersonal contact with anyone outside the group. The goal of the closed living group treatment program was to create a degree of interpersonal anxiety which was conducive to personality change. The prisoners were tested at the start and at the completion of training with the Delinquency Scale and a two-way factorial analysis of covariance was computed to measure attitude change. It appeared that high maturity prisoners had significantly positive attitude changes, as shown by reduced Delinquency Scale scores, when they were in groups with high maturity or mixed maturity NCO's. Significantly greater reductions in scores were obtained in the nine-week groups as opposed to the six-week groups.


Problem

To develop a test to predict those who might be delinquent in their military career.

Subjects

Various samples were tested, all were either naval recruits or naval disciplinary offenders in retraining, unless otherwise stated.

Scope

Parts of the Infrequency (IN) scale and the Delinquency (De) scale of the California Psychological Inventory (CPI) were given together to be validated as the Inventory of Personal Opinions (IPO).

Results and Conclusions

The IN scale guards against careless test taking. Twenty-four of Gough's 28 items in the IN scale were used in the IPO. If a subject scored eight or greater, his test was deemed invalid. The CPI itself contains 474 items; 200 are from the Minnesota Multiphasic Personality Inventory (MMPI).
IPO Construction. The author reviewed the individual items on the CPI and selected items mainly from the Delinquency, Potential and Social Responsibility scales and some individual items which had face validity to discriminate. Of the 325 items studied in a pilot study, 160 gave promise of being useful.

MMPI profiles of 87 retrainees, 38 marines, 35 submarine candidates, and 41 sailors were reviewed and picked up 44 MMPI items. Of those, 11 were found to discriminate offenders from the non-confined. Sixty original items were written. Therefore, a total of 251 delinquency items and 24 IN items made up the IPO.

The 65 CPI items found strongest in the pilot study were administered first in the battery, with the 24 IN items interspersed, the remainder of the CPI items, the MMPI items, and the 60 original items were intermingled toward the end.

255-Item Version. Only IN's of seven or less were included in the sample. 423 retrainees, 232 recruits, 998 marine recruits were the subjects. Only one non-confined subject, but six percent of the confined group, was eliminated by high IN scores.

152-Item Version. Item analysis and changing questions (31) to yield a greater number of positive answers yielded a 152-item version. Two hundred and forty-three (243) retrainees and 219 recruits took this version.

143-Item Final Version. Two forms were developed with identical content and different item placement (on Form One, all the items on the last page would be answered "true" by the "ideal" delinquent).

Form One

- 83 Retrainees
- 222 Recruits

A cutting score of 55 or more correctly identified 59% of the retrainees and 94% of the recruits.

Form Two

- 541 Retrainees
- 1976 Recruits

A score of 55 or more correctly identified 55% of the retrainees and 95% of the recruits.

Control for "faking" was obtained by asking these samples to look "bad" e.g., look unfit for service.
<table>
<thead>
<tr>
<th>Samples</th>
<th>Percent IN Score Over 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>54 Recruits</td>
<td>72%</td>
</tr>
<tr>
<td>44 Retrainees</td>
<td>36%</td>
</tr>
<tr>
<td>38 Retrainees</td>
<td>63%</td>
</tr>
<tr>
<td>31 Retrainees</td>
<td>97%</td>
</tr>
</tbody>
</table>

The opposite to the above was accomplished by asking these samples to look "good."

<table>
<thead>
<tr>
<th>Samples</th>
<th>Percent IN Score Over 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>55 Recruits</td>
<td>4%</td>
</tr>
<tr>
<td>58 Retrainees</td>
<td>62%</td>
</tr>
<tr>
<td>39 Retrainees</td>
<td>3%</td>
</tr>
</tbody>
</table>

The author attributes score discrepancies to the test administrators' variation in the setting of the task. The resultant effects of "faking-good" on the D score (used only with IN below 7) was:

<table>
<thead>
<tr>
<th>Samples</th>
<th>Median score</th>
</tr>
</thead>
<tbody>
<tr>
<td>53 Recruits</td>
<td>28</td>
</tr>
<tr>
<td>22 Retrainees</td>
<td>55</td>
</tr>
<tr>
<td>33 Retrainees</td>
<td>59</td>
</tr>
</tbody>
</table>

"Faking-bad" on the D score results in high IN scores to the samples are small;

<table>
<thead>
<tr>
<th>Samples</th>
<th>Median D score</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 Recruits</td>
<td>45</td>
</tr>
<tr>
<td>28 Retrainees</td>
<td>57</td>
</tr>
<tr>
<td>15 Retrainees</td>
<td>68</td>
</tr>
<tr>
<td>1 Retrainee</td>
<td>84</td>
</tr>
</tbody>
</table>

The author's conclusion is the IPO is resistant to deliberate faking.

Reliability. Split-half reliability (corrected by Spearman-Brown formula) on the 152-item version and the 143-item version ranged from r+.64 to r=.83.

Correlation between the General Classification Test scores and D scores in a sample of 187 recruits was -.19.

In terms of delinquent personality, Gough and Peterson (1952) found four personality clusters with their Delinquency Potential Scale:
1. Role taking, deficiencies and insensitivity
2. Resentment against family
3. Alienation, despondency and lack of self-confidence
4. Poor scholastic adjustment and rebellion

This study found results to support the following clusters as well as the original four:

1. Denial of civil and military responsibility
2. Exploitation of women
3. Rejection of long term plans or relationships


Problem

To compare the personality and social background of probation violators against college students and duty personnel with no records and then to determine a profile of a probation violator.

Subjects

Probation violators (142) at the U.S. Navy Disciplinary Barracks, Portsmouth, New Hampshire; students (206) from the University of New Hampshire, of approximately the same age (143 of these students had past military experience); and duty personnel (205) from those assigned to work at the U.S. Navy Disciplinary Barracks.

Scope

A personality and background questionnaire was administered in interview style. The interview contained 249 questions, principally of the objective type, which could be answered by "Yes" or "No," or by simple statements. The probation violators were questioned a second time in a personal interview by a member of the psychiatric department.

Results and Conclusions

Physical Condition. All subjects had been examined and found normal. Of the probation violators (PV), 13.7% felt something was wrong with them, as did 12.1% of the college students (CS) and 3.5% of the regular duty personnel (DP). PV's (20.1%) said they were considered to be nervous children, 11.4% of the CS and 12.8% of the DP felt the same.
**Family History.** Fathers of PV (21.2%) were not living, compared to 16.5% of the CS and 8.3% of the DP; 17.2% of the PV mothers were not living, compared to 10.6% of the CS and 9.6% of the DP. PV (22.6%) had parents who were divorced or separated, versus 8% of the CS and 20.6% of the DP. PV (41.9%) were victims of broken homes (death or separation) before the age of 16; compared to 22.8% of the CS and 21.1% of the DP. Eighty-five percent of the reasons for violating parole was AWOL.

At the time of offense, 54.2% of the PV mothers and 52.2% of the fathers claimed to be in poor health; 12.1% of the CS mothers and 11.7% of the fathers were reported in poor health. The percentages for the DP were 17.5% of the mothers and 11.3% of the fathers. The parents of the PV (18.5%) were incompatible; 20.5% of the DP parents were incompatible as were 8.5% of the CS. PV (11.1%) did not get along with their parents, as did 3.9% of the CS and 3% of the DP. Twelve percent of the PV felt their homelife was not pleasant, as did 6.5% of the CS and 8.1% of the DP. PV (30.6%) had run away from home (usually because of resentment to punishment), as had 7.3% of the CS and 19.0% of the DP. PV (24.2%) had relatives who had been in jail, versus 11.3% of the CS and 18.0% of the DP.

**Socioeconomic Background.** PV (2.1%) came from a bad section of the community, as did 1.0% of the CS and 3.6% of the DP. However, this did not corroborate with estimates of family income. The financial situation of 31.9% of the PV families was poor, versus 15% of the CS and 14.3% of the DP. The families of PV (35.1%) were on relief at some time, as were 10.8% of the CS and 24% of the DP.

PV families consistently moved more frequently than the others. Only slight differences were observed in early truancy between groups. The PV changed jobs more frequently than the others. Fifty percent of the PV preferred outdoor athletics for recreation and 33% of the PV preferred a combination of outdoor/indoor recreation, while 20% of the CS preferred outdoor recreation and 75% of the DP preferred a combination.

A fourth of the civilian offenses were attributable to drinking. PV (22.4%) "got drunk frequently," compared to 4.6% of the CS and 18.9% of the DP. PV (34.5%) "got into trouble as a result of drinking," versus 5.8% of the CS and 19% of the DP. The use of drugs was insignificant.

**Marital History.** The mean age at which the PV was married was 20.5 years; compared to 22.1 years for the DP. Forty-four percent of the PV were married, versus 23.8% of the CS and 25.3% of the DP. Twenty-two percent of the PV had been married before, compared to 92.0% of the DP. The divorce rate was 27.8% for the PV, versus 12.0% of the DP. Twenty-seven percent of the PV did not get along well with their wives, compared to 6.1% of the DP.
Educational Background. The average educational level of the PV was 8.1 years, range 0-14 years. For the DP, 10.3 years was the average last grade completed, range 5-14 years. The PV started school at an average age of 6.1 years; 5.6 years was the average age for the DP. PV (16.3%) said they had trouble with teachers, compared to 30.6% of the CS and 16.8% of the DP. PV (11.4%) had trouble with other students, versus 24.3% of the CS and 16.0% of the DP.

Most school failures occurred in the third and fifth grades.

Sixty-one percent of the PV listed going to work as their reason for leaving school, compared to 23.6% of the DP.

Self-Evaluation. The PV tended to identify himself with the positive traits of others, while he over-evaluated his positive traits and under-evaluated his adverse traits. Both DP and CS listed more characteristics of the depreciating kind.


Problem

To ascertain the efficacy of applying the Naval Personal Inventory to the prediction of disciplinary problems due to psychopathology.

Subjects

Unselected Navy court martial prisoners (1,239) of which 1,121 were White and 118 were Negro; 243 were awaiting trial and 996 were serving sentences.

Scope

The Naval Personal Inventory, which is a screening device, was used to determine if psychiatric interviewing is warranted.

Results and Conclusions

The Naval Personal Inventory has two parts: Part I is an abbreviation of the Cornell Selectee Index, and Part II is a short form of the Shipley Inventory. A cutoff score of 80 or more was arbitrarily used for the first part, and one or more on the second.

Fifty percent of those in the brig scored high enough on the first part to warrant psychiatric interviewing. Seventy-five percent of those in the brig scored high enough on the second part to warrant psychiatric interviewing.
A cutoff of eight plus yielded 10% false positives, however, 55% of the brig population scores were eight or less, yet psychodiagnosis yielded findings.

Negroes scored significantly higher on both parts.

The authors conclude that the scale does not serve as an aid in predicting offenses.


Problem

To compile factors relating to successes and failures of Navy general court martial offenders restored to duty under wartime conditions.

Subjects

Men (926) released from confinement during March 1945, averaging 6.4 months of confinement:

614 (66.31%) made subsequent successful adjustment
312 (33.69%) failed to adjust properly
889 (of the 926) were confined for AWOL, AOL of desertion convictions

Scope

The data was based entirely on performance records of the subjects. The follow-up period was six months after release. Psychiatric findings, psychometric data, and social case histories were not available for analysis. There are four types of confinement activities in the Navy: (1) Prisons -- long term and serious offenders; (2) Disciplinary Barracks -- short term offenders not qualified for Retraining Command; (3) Retraining Command -- short term tractable offenders with the best prospects for return to duty; and (4) Brigs -- primarily for sentences other than general court martial.

Results and Conclusions

Four disciplinary barracks were involved in the study and their success rates varied from 47.8% to 74.5%. The men from the most successful discharge barracks were significantly more often service-rated (trained); more likely to have had their last duty on a ship; been assigned from receiving station-ship-receiving station. Successes
averaged 30.8 days between assignments longer than failures, and were more likely to be on a ship at follow-up. The high failure barracks included a greater percentage of men with less time in service than the other barracks.

The length of sentence had no bearing on the eventual success or failure.

The nature and extent of previous delinquency appears to be a factor in success or failure. Seventy-five percent of the failures and 62.5% of the successes had previous naval offenses.

Most of the men who failed did so through AWOL (96.7%) again, and over half of them failed before they reached a new duty station. The average length of time until the post release offense was 35 days.

The length of time between confinement facility and the next duty station was significantly different. The successes averaged 21.9 days between assignments and the failures averaged 10.9 days.


Problem

To discover the factors which might lead a man to be placed in a naval brig.

Subjects

Unselected court martial admissions (1,063) to a naval disciplinary barracks.

Scope

Data was collected from records and information gleaned at an intake interview at the disciplinary barracks.

Results and Conclusions

.94.0% of the total admissions was for AWOL
.53.8% were repeaters
.16.7% had civil convictions prior to entering the Navy
.Average schooling was 9.3 grades
.27.9% were married, 1.7% divorced or separated
.32% admitted truancy while in school
.6.4% had been expelled from school
2.2% had been suspended
1.4% had spent some time in truant or reform school
Average length of time for AWOL was 33.83 days, the median
was 16.23 days; average AOL was 33.09 days; with a median
of 15.92 days

Reasons given for AWOL were:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number Claiming Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illness (of person, family, or nervousness)</td>
<td>265</td>
</tr>
<tr>
<td>Dislike (of Navy, ship, officers, shipmates, or duty)</td>
<td>160</td>
</tr>
<tr>
<td>Homesickness</td>
<td>130</td>
</tr>
<tr>
<td>Wanted to be free to have a good time</td>
<td>67</td>
</tr>
<tr>
<td>Family trouble</td>
<td>31</td>
</tr>
</tbody>
</table>


Problem

To predict which Air Force prisoners may be restored to duty, and which should be discharged.

Subjects

The computation sample was 1,303 of the 6,799 retrainees who had been released between 1952 and 1962. The cross-validation sample was 583 of the 664 retrainees who passed through the Retraining Group between January 1964 and June 1965. The follow-up period for the cross-validation sample was six months.

Scope

Two multiple regression analyses were made by use of a computer on a sample of former retrainees. Data was gathered on 139 variables; expansion of the 139 variables resulted in 687 variables being analyzed. There were three possible outcomes for the retrainees: discharge, successful return to duty, or failure after return to duty. A cross-validation sample was included in the study. Prediction scores were arrived at by totaling the regression weights of the items. Upper and lower cutoff scores left a mid-range of unpredictables.
Results and Conclusions

A 61-variable prediction equation was derived from the first analysis. On the cross-validation sample this system was 67.7% accurate in predicting successes and 58.7% accurate in predicting failures for an overall accuracy of 61.7%.

The second analysis resulted in a 13-item system of objective items suitable for hand analysis. This system was accurate in the cross-validation sample 77.4% of the time for successes and 72.5% of the time for failures, for an overall accuracy of 74.6%.

The 13 variables are:

1. Base of referral
2. GED not necessary, high school diploma received
3. Months remaining on current enlistment
4. Number of prior military convictions
5. Present offense -- AWOL or desertion
6. No criminality among members of family
7. Sent to base guardhouse
8. Dishonorable discharge or court martial sentence
9. Mother did not work
10. Present offense involved violence
11. Father served in no military
12. No intent to make career of Air Force
13. Never removed from technical school

This article also contained a very good review of prediction studies and methodology.

In reviewing prediction studies, Smith cites the following major studies, finding the following items the most successful:

Glueck (1966)

1. Supervision of boy by mother
2. Discipline of boy by mother
3. Family cohesiveness

California Youth Authority (Beverly, 1965)

1. Age at first admission
2. Age at release
3. Number of prior commitments
4. Committing offense (crime against people versus other)
5. Mental rating
6. Race
Viohert and Zahnd (1965)

1. Length of sentence
2. Age
3. Marital status
4. Number of previous convictions
5. Parole supervision agency
6. Institution from which released

Cowden (1966)

1. Age
2. Clinical personality ratings
3. Measures of institutional adjustment (Cowden rejected home environment variables as non-significant)

In terms of predicting successful return of Air Force prisoners, Fisher, Ward, Holdrege, and Lawrence (1960), Gordon and Bottenberg (1962), and Flyer (1963) found the following items successful:

1. Number of years of formal education
2. Scores on enlistment classification batteries
3. Basic training officer and peer ratings
4. Age

Smith summarizes four approaches to weighting items:

1. The unit weighting, such as Burgess used in 1928, allows for one point for each characteristic a parolee has in common with successful parolees in the past. The points are totaled to yield the potential parolee's probability of successful parole. (The objection to this technique is that it cannot reflect the relative importance of each of the items.)

2. In the Gluecks weighting technique for each item (usually five), the subject is given a number equal to the percentage of delinquents possessing the characteristic. Thus, the score is added to place the individual in one of three risk categories. (The objection to this technique is that it does not allow for interaction effects between the variables.)

3. Glaser (1962) has developed a configuration table as a method of weighting and summarizing the predictive potential of multiple variables. The configuration table is constructed by plotting the most discriminative predictor down to the least discriminative in terms of percentages. The sample is divided by the most discriminative predictor, and then the next most discriminative predictor subdivides, and so on. From such a table the strength of each variable alone and a combination may be seen, however, value judgments must be applied in determining significance, and there is no standard procedure for constructing configuration tables.

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4. Multiple linear regression analysis is a mathematically complicated procedure for achieving optimum weights for predictor variables while accounting for intercorrelations between variables. The California Youth Authority has applied this type of weighting system in Beverly's 1959, 1964, and 1965 studies.
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SUMMARY

The researcher in the area of prediction of parole success and delinquency will discover the following:

1. There is a wide variation in the definition of criminal behavior.

2. The base rate of criminal behavior must be known to judge the effectiveness of a prediction instrument.

3. There are three basic types of information measured:
   a. background variables
   b. personality variables
   c. family variables

4. Questionnaires involve direct or guarded questions, presented either signed or anonymously; there seems to be no differences in results.

5. There are two basic methods of obtaining data:
   a. Administer the instrument, wait for follow-up period, then determine rates.
   b. Pick previously defined populations and determine differences.

6. Approaches to research include the following:
   a. Identify potential delinquents at the start of their public school career (involves a base rate of approximately five percent delinquent).
   b. Identify potential delinquents at adolescence from "bad neighborhoods" (involves a base rate of approximately 50% delinquent).

7. Study populations have included the following:
   a. Juvenile detention centers (involves a base rate of approximately 50% delinquent).
   b. Prisons (involves a base rate of approximately 60% recidivism).
   c. Potential military offenders at induction centers (involves a base rate of approximately five percent offenders).
   d. Military correctional facilities (involves a base rate of approximately 40% recidivism).
The following table identifies the variables used in the preceding studies and summarizes them according to several categories of "Personal History Variables." Studies concerned with civilian prediction of parole success and delinquency accounted for 75% of the variables which were found to be significant for purposes of prediction. The unique environment found in the military service, in combination with the number of offenses which are strictly military in nature, could account for the disproportionate percentage of significant relationships found in studies of military prediction of parole success and delinquency. Additionally, the relatively short time of service of the majority of military personnel does not allow for thorough follow-up in the area of parole success.

The personal history variables of family, personality and school record were the most studied categories, accounting for 42.2% of the variables studied. Significant relationships were found in 44% of the articles which were categorized under School Record and 40% of those under Personality; also 38% of the articles dealing with Incarceration Record and 25% of those studying Family. The categories of Arrest Record, Employment Record and Marriage also appear to be important in terms of the number of significant relationships relative to the total number of times variables of these types were studied.