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ROBERTS, BARBARA TAYLOR
AN APPLICATION OF THE GOLDBERG RULES IN THE
DIAGNOSIS OF PERSONALITY DISORDERS OF FEDERAL
YOUTH OFFENDERS COMMITTED FOR OBSERVATION AND
STUDY.

THE UNIVERSITY OF OKLAHOMA, PH.D., 1977

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AN APPLICATION OF THE GOLDBERG RULES IN THE
DIAGNOSIS OF PERSONALITY DISORDERS OF
FEDERAL YOUTH OFFENDERS COMMITTED
FOR OBSERVATION AND STUDY

A DISSERTATION
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By
BARBARA TAYLOR ROBERTS

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AN APPLICATION OF THE GOLDBERG RULES IN THE
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It is with deep respect and appreciation that I dedicate this dissertation to the prisoners of the Federal Reformatory of El Reno, Oklahoma. The experience of knowing and working with them has certainly enhanced my awareness of the complexities of their lives and what it is like "doing time."

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	vi
LIST OF FIGURES	ix
<u>CHAPTER</u>	
I INTRODUCTION	1
II STATEMENT OF THE HYPOTHESES	18
III METHOD	24
IV RESULTS	40
V DISCUSSION	83
VI SUMMARY	89
REFERENCES	91
APPENDIX A:	
Highest School Level Completed by Observation and Study Offenders	96
APPENDIX A1:	
Level of Education Completed by Race of Observation and Study Offenders	98
APPENDIX B:	
Occupation at Time of Arrest of Observation and Study Offenders	100

APPENDIX B1:

Classification of Occupation at Time of Arrest by Race of Observation and Study Offenders	102
--	-----

APPENDIX C:

Marital Status of Observation and Study Offenders	105
--	-----

APPENDIX D:

Type of Military Discharge of Observation and Study Offenders	107
--	-----

APPENDIX E:

Number of Prior Commitments of Observation and Study Offenders	109
---	-----

APPENDIX F:

Bureau of Prisons Form 6: Social Data	111
---	-----

APPENDIX G:

Bureau of Prisons Form 7: Educational Data	113
--	-----

APPENDIX H:

Bureau of Prisons Form 8: Medical and Related Data	115
---	-----

APPENDIX I:

Goldberg's Three MMPI Predictor Profile Index Means for all 109 Observation and Study Case Subjects	117
--	-----

APPENDIX J:

Raw Data MMPI Profile Mean Score	120
--	-----

LIST OF TABLES

<u>Table</u>	<u>Page</u>
I Type and Number of Observation and Study Cases Committed to El Reno During the Years 1971 and 1972	26
II Group Classification of Primary Diagnoses of Offenders Made by Clinicians	33
III Group Classification of Secondary Diagnoses of Offenders Made by Clinicians	34
IV Group Classification of Tertiary Diagnoses of Offenders Made by Clinicians	35
V Group Classification of the Present Offense of Observation and Study Cases by Race	37
VI Number of Cases Diagnosed by Type of Clinician	39
VII Behavioral Classification of Subjects Based on Predictor Profile Index Results	42
VIII Point Biserial Correlation Coefficients Between The Predictor Profile Indices and the Diagnos- ticians for all Observation and Study Cases	46
IX Predictor Profile Index Means and Standard Deviations Based on Clinical Diagnoses	53
X Point Biserial Correlation Coefficients Between the Prediction Profile Indices and the Diagnosti- cians for Observation and Study Cases Classified by Type I Offense (Drug Laws)	55
XI Predictor Profile Index Means and Standard Devia- tions Based on Clinical Diagnoses for Type I Offense Observation and Study Cases	56

<u>Table</u>		<u>Page</u>
XII	Point Biserial Correlation Coefficients Between the Predictor Profile Indices and the Diagnosticians for Observation and Study Cases Classified by Type II Offense (Violent Crimes).	57
XIII	Predictor Profile Index Means and Standard Deviations Based on Clinical Diagnoses for Type II Offense Observation and Study Cases	58
XIV	Point Biserial Correlation Coefficients Between the Predictor Profile Indices and the Diagnosticians for Observation and Study Cases Classified by Type III Offense (Crimes Against Property and Other)	59
XV	Predictor Profile Index Means and Standard Deviations Based on Clinical Diagnoses for Type III Offense Observation and Study Cases	60
XVI	Point Biserial Correlation Coefficients Between the Predictor Profile Indices and the Diagnosticians for Observation and Study Cases Classified by Race (White Subjects)	61
XVII	Prediction Profile Index Means and Standard Deviations Based on Clinical Diagnoses for Observation and Study Cases Classified by Race (White Subjects)	63
XVIII	Point Biserial Correlation Coefficients Between the Predictor Profile Indices and the Diagnosticians for Observation and Study Cases Classified by Race (Black Subjects)	64
XIX	Predictor Profile Index Means and Standard Deviations Based on Clinical Diagnoses for Observation and Study Cases Classified by Race (Black Subjects). . .	65
XX	Point Biserial Correlation Coefficients Between the Predictor Profile Indices and the Diagnosticians for Observation and Study Cases Classified by Race (Native Americans)	66
XXI	Predictor Profile Index Means and Standard Deviations Based on Clinical Diagnoses for Observation and Study Cases Classified by Race (Native American).	67

<u>Table</u>		<u>Page</u>
XXII	Point Biserial Correlation Coefficients Between the Predictor Profile Indices and Diagnoses Made by Psychiatrists for Observation and Study Cases	68
XXIII	Predictor Profile Index Means and Standard Deviations Based on Clinical Diagnoses of Psychiatrists for Observation and Study Cases	69
XXIV	Point Biserial Correlation Coefficients Between the Predictor Profile Indices and Diagnoses Made by Ph.D. Psychologists for Observation and Study Cases	70
XXV	Predictor Profile Index Means and Standard Deviations Based on Clinical Diagnoses Made by Ph.D. Psychologists for Observation and Study Cases	71
XXVI	Point Biserial Correlation Coefficients Between the Predictor Profile Indices and Diagnoses Made by Psychology Trainees for Observation and Study Cases	72
XXVII	Predictor Profile Index Means and Standard Deviations Based on Clinical Diagnoses Made by Psychology Trainees for Observation and Study Cases	73
XXVIII	Primary Diagnoses: Distribution of Normal and Deviant Scores Ranked on Hs+2P-ma Index	74
XXIX	Primary Diagnoses: Distribution of Sociopathic and Psychiatric Scores Ranked on 2Pd-Hy-Sc Index	78
XXX	Primary Diagnosis: Distribution of Neurotic and Psychotic Scores Ranked on L+Pa+Sc-Hy-Pt Index	82

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1 Hierarchical Classification of Behavioral Disorders Resulting From Goldberg's Formulas	16
2 MMPI Group Profile of all 109 Subjects	43
3 MMPI Group Profiles of Subjects by Race	44
4 Normal and Deviant Classification Distribution of Subjects as Determined by First Stage Predictor Profile Index (Hs+2Pd-Ma) and the Diagnoses of Clinicians	47
5 Distribution of Fifty-five Offenders Diagnosed Sociopathic by Clinicians and Forty-six Offenders Classified Sociopathic by Predictor Profile Index (2Pd-Hy-Sc)	48
6 Distribution of Eight Offenders Diagnosed Psychia- tric by Clinicians and Twenty-seven Offenders Classified Psychiatric by Predictor Profile Index (2Pd-Hy-Sc)	50
7 Distribution of Five Offenders Diagnosed Neurotic by Clinicians and Four Offenders Classified Neurotic by Predictor Profile Index (L+Pa+Sc-Hy-Pt)	51
8 Distribution of Three Offenders Diagnosed Psychotic by Clinicians and Twenty-three Classified Psychotic by Predictor Profile Index (L+Pa+Sc-Hy-Pt)	52

AN APPLICATION OF THE GOLDBERG RULES IN THE DIAGNOSIS OF
PERSONALITY DISORDERS OF FEDERAL YOUTH OFFENDERS
COMMITTED FOR OBSERVATION AND STUDY

CHAPTER I

INTRODUCTION

Challenge of Crime in a Free Society, the report of the President's Commission (1967) on Law Enforcement and The Administration of Justice, is one of the most definitive examinations of the problem of crime and dealing with prevention and correction ever. In part, the report states:

America's system of criminal justice is overworked, undermanned, under-financed and often misunderstood. It needs more information and more knowledge, it needs more technical resources, it needs more coordination amongst its many parts, it needs more public support, it needs the help of community programs and institutions in dealing with offenders and potential offenders; it needs above all the willingness of re-examining the old ways of doing things; to reform itself, to experiment, to run risks; to dare, it needs vision.

The problems of criminal justice in America, outlined in the above quotation, are manifold and complex. The aim of this research investigation will be to examine two of the difficult areas pinpointed: institutions and offenders. More specifically, this study will entail

an analysis of a newly developed measure of behavior disorders in young adult offenders.

One method available to a scientist attempting to assess behavior in offenders is prediction. Gottfredson (1967) contended that "prediction is a traditional aim of science, and is a requisite to any effective crime and delinquency prevention or control program. If we seek to control delinquent or criminal behavior, then first, we will need to be able to predict it." Any prediction method should provide a way of summarizing previous experience in order to find a useful guide to future decisions. As William James aptly put it, "we can establish general expectations....We live forwards, but we understand backwards."

The literature is replete with prediction studies of criminality in youth and young adults. The majority of prediction works have been concerned with the prediction -- and prevention -- of delinquency among general populations (Glueck, 1950 and 1960); The stability of predictive factors over time and over different groups of offenders for whom probation or supervision had been ordered (Monachesi, 1932; Gillen and Hill, 1950; and Reiss, 1951; and most abundantly, parole prediction studies in which efforts were based on the theory of "differential identification" (Glaser, 1954) of offenders, in terms of the risks of their violating parole or being reconvicted (Ohlin, 1951; Mannheim and Wilkins, 1955; Gottfredson and Beverley, 1962; Voss, 1963; Gough, Wenk and Rozyngo, 1965; and Babst, Gottfredson and Ballard, 1968).

Few studies have specifically investigated the relationship of emotional illness to criminality in an effort to develop assessment methods with sufficient configurational patterns to accurately classify

different behavior types within penal institutions. Such studies are crucial to establishing realistic treatment programs. --

Sadoff (1971) stated that the relationship between emotional illness and criminal behavior is complex, and that numerous attempts have been made to classify and integrate criminal behavior into accepted psychosocial diagnoses. Some mental health professionals consider all criminals to be mentally disturbed, while other professionals consider environmental factors to be the predominating influence of crime. Sadoff proposed various combinations and associations of theories. In a paper prepared for the American Bar Association Journal (1968), he concluded in a study in which he presented five "non-professional criminal" types, that each case exemplifies the phenomenon in which people accused of committing crimes have used the criminal-legal process as an indirect mechanism for handling internal conflicts. All respondents utilized the legal process in a therapeutic manner to avoid facing their real difficulties and receive some form of relief from their anxieties. People may handle anxiety or conflict in a number of ways: they may be aware of and feel anxiety, they may convert the anxiety to physical symptoms, they may repress anxiety, or they may act it out in aberrant behavior. Sadoff summarized his study as follows:

Many of the case histories presented reflect examples of the individual "acting out" his internal conflicts in such a manner as to deny their existence and focus only on antisocial criminal behavior. In this way, the individual may avoid recognizing that which he wishes to hide. In some cases our criminal structure allows for successful self-deception and the conflicts remain unsolved. Recidivistic criminal behavior may then result.

The individual who uses the criminal-legal structure in order to obtain necessary treatment, either because he feels he has been denied treatment, or because he cannot accept voluntary therapy programs, poses an even greater challenge. Here, the patient recognizes his underlying emotional difficulties but may be so aggressive, hostile and dangerous that the typical psychiatric facility is unable or unwilling to treat him. In some cases this rejection may encourage the individual to react in a criminal manner in order to have court-mandated or enforced psychiatric treatment.

We must be aware of underlying psychodynamic mechanisms in criminal behavior in order to prescribe proper disposition...(p. 46)

Sadoff has centered on the core of the problem in classifying categories of emotional disturbance in conjunction with criminality. There is a need for uncovering and understanding underlying psychodynamic mechanisms. The question is: How can the clinician make predictions concerning the personality of an offender and, if necessary, formulate an individually styled treatment program -- particularly, in a prison setting with a disproportionate and growing ratio of offenders to clinicians?

Clinical Versus Actuarial Prediction

The variety of data available to a clinician involved in research can be as far ranging or as limiting as the research hypotheses dictate. Whether or not clinical or actuarial methods are employed in the research has no bearing on the type of data used. Gough (1962) has written:

The defining distinction between clinical and actuarial methods is instead to be found in the way in which the data, once specified, are combined for use in making the prediction. If the procedures, however complex mathematically,

are in principle such that a clerk, or a machine, or anyone else could carry out the necessary operations and that the result would be the same in all instances, then the method is actuarial or statistical in the sense here being discussed. If the combining is done intuitively, if hypotheses and constructs are generated during the course of the analyses, and if the process is mediated by an individual's judgment and reflection, then the method is clinical (p. 530).

Quay (1965) maintained that to concentrate on delinquency per se is of little value. His research and reviews have revealed that knowledge of different delinquent types would serve only to clarify past and future research on delinquency. However, if the goal is to predict and control behavior, then studies of personality dimensions that are related to delinquency should be of primary interest.

A review of the research literature focused on the assessment and prediction of personality characteristics of offenders -- for purposes of diagnosis and treatment -- indicates a use of both clinical and actuarial methods.

There are a number of works which have utilized clinical methodology to increase an understanding of psychopathology of criminality. The contribution some of these works have made is irrefutable. However, replication has been difficult, because even the so-called classic studies are based almost entirely on subjective clinical experiences rather than objective evidence.

Eissler (1949) studied a variety of personality types and stressed the necessity to establish a meaningful therapeutic relationship with delinquents. Her theories, based heavily on the earlier works of Aichhorn (1935), focused sharply on the connection between gross criminal behavior in parents and delinquent behavior in their

children. Eissler concluded that because society needs criminal or delinquent scapegoats, it seduces individuals into delinquent behavior, and interferes with programs which prevent delinquency.

Johnson and Szurek (1952) concentrated their research on defect or distortion in the conscience as the ontogeny of delinquency. They felt that this abnormality was caused by a delinquent's constitutional inability to develop an inner control, by identification with a pathological parent or parent figure, by severe and cruel and emotionally traumatic experiences in a particular social or cultural group, or a combination of these factors. The authors demonstrated in their clinical work that their "observations apply equally to the young delinquent or the psychopathic personality of years later, who is etiologically a delinquent grown older" (p. 342).

Succinctly stated, the Johnson-Szurek thesis is that the anti-social behavior in the child is encouraged unconsciously by parents who participate in the process, vicariously gaining pleasure in the child's deeds and thereby, subtly carrying out their own unconscious hostile and destructive feelings toward the child.

According to Abrahamson (1949) all delinquents are emotionally disturbed, and their disturbance has resulted from tensions in the family. In later research (1960) he broadened his theory to encompass multiple factors in the causation of criminality. Throughout his research Abrahamson stresses that "basically the persistent juvenile delinquent has a deformed character structure." His thesis is based primarily on comparative studies made of 100 criminals and 100 non-criminals who required treatment. Using data from psychiatric

interviews, additional data was gathered from Rorschach tests administered to 31 criminals and 29 of their family members. He concluded that criminals always manifested emotional disturbance and there was significantly more family tension in the criminal group. The study was weakened because Abrahamson had a priori knowledge of who was and was not delinquent and he made no attempt to collect the same data from both groups. Also, he acknowledged that "some differences between the groups were not easy to detect except through skilled interviewing and interpretation necessarily puts us on guard about the possible operation of subjective bias."

In their classic study, the Gluecks (1950) found only 36 (seven percent) psychopaths in their group of 500 delinquents. These findings are the result of the Gluecks' experimentation in predicting juvenile delinquency in school-aged children. Their research resulted in a predictive instrument (The Social Factors Prediction Table) to distinguish at the time they enter school those children who are in danger of developing into persistent offenders, especially in high-delinquency areas. The study is presented in this review because one aspect of the Gluecks' analysis took into account the rate of psychopathology manifested by the group.

Dissimilarity in the proportion of pathology concomitant with delinquent populations has been observed in other studies. Reiss (1952) noted, for example, in a group of 1,100 delinquent probationers, that emotional disorders could be associated with over 20 percent of the population. The other persons were found to be "relatively integrated."

Many of the discrepancies in the rates of personality disorders associated with delinquency and criminality can be attributed to the differences in diagnostic methods and categories used for classification of behavior. The paradigm followed by some researchers has been to use empirical designs. In this manner the predictive usefulness of procedures and findings can be cross-validated and thus increase the contribution to prediction research.

Roebuck's (1965) empirically designed study was based primarily on the type of offense most frequently committed by an offender. The statistical method of "association analysis" that she used was adapted from Wilkins and MacNaughton-Smith (1954), who developed prediction methods for probationers. Roebuck's data was derived from the arrest records of 400 offenders in a Virginia reformatory. The subjects were selected at random and she identified thirteen different patterns of criminal behavior. As a result of the patterns, she stated three types of offenders: (1) single pattern types in which the offender's record showed at least three arrests, all for the same charge; or, if there were other charges, then four arrests for the same charge; (2) double pattern and (3) triple pattern. These criteria were met if two or three types of crimes had been committed respectively.

Besides the arrest records, Roebuck analyzed social and personal backgrounds of the different types of offenders. Offenders arrested for armed robbery tended to be comparatively young, reared in unsatisfactory ghetto homes, and members of juvenile gangs. Criticism of Roebuck's work has focused mostly on her attributing behavioral differences to crimes delineated by legal definitions.

Gibbons (1965) closely matched Roebuck's research in terms of association of criminal career with learned social roles, i.e., deviant behavior. Gibbons stated that different role-careers are caused by different combinations of social and personal factors. Many offenders, he contended, display stable patterns of delinquent or criminal role-playing. He developed two typologies, one for juvenile delinquents and another for adult criminals. He hypothesized that the role career of the "heavy" usually begins with "membership in a delinquent gang, is characterized by increasing involvement with older professionals from whom necessary skills are learned, and often terminates with 'retirement' into a non-criminal occupation in middle age" (p. 134). Gibbons further suggested that the social and personal background of the heavy includes an urban, lower-class background, deprivation at all levels of his or her upbringing, along with deviant behavior manifested in sibling and peer relationships and frequent contacts with the police. A drawback in Gibbons' study is that his behavioral classification of criminality has not stood up well under cross-validation.

Argyle (1961) reviewed works on the behavioral components of criminal behavior based on Freudian theory. All the works he reviewed were the results of personality tests which measured traits of delinquents and non-delinquents. He found a number of the tests that did in fact measure traits which could group delinquents into four types: (1) inadequate super-ego; (2) deviant identifications; (3) weak ego control and, (4) lack of sympathy. Hood and Sparks (1970) criticized this study on the ground that if Freudian theory was shown to be

correct, some criminals still would not fit any of Argyle's types.

There is paucity of research using the Minnesota Multiphasic Personality Inventory (MMPI) in the prediction of pathological factors in criminality. A study of particular interest, involving the analysis of personality traits of offenders, was conducted by Gough and Peterson (1952). They developed a modified series of 64 items from the MMPI aimed at identifying and measuring predispositional factors in crime and delinquency. Their theory of psychopathology of offenders centered around the role-taking ability -- or lack of it -- in offenders. Subjects in the study included 940 delinquent males and 124 delinquent females incarcerated in Minnesota State Prisons. Control subjects numbered 168 men and 178 women. The results were cross-validated using 1,092 army recruits and 99 stockade prisoners in Fort Ord, California. Critical values were significant for both the original research and the cross-validated research beyond the .01 level. Based upon their research, Gough and Peterson stipulated that offenders could be characterized by the following: (1) role-taking deficiencies, insensitivity to interactional cues and the effects of one's behavior on others; (2) resentment against family, feelings of having been victimized and exploited in childhood; (3) feelings of dependency and alienation, lack of confidence in self and others; and (4) poor scholastic adjustment and rebelliousness.

Lanyon (1968) in a comprehensive review of 293 mean clinical profiles of the MMPI, included 20 separate studies (comprising over 3600 subjects in all) on adolescents, delinquent youths, and prisoners. The major objective of each of these studies was to distinguish any

prevailing attributes or patterns of delinquents and prisoners. In what might be described as overwhelming empirical evidence and a cross-validation of findings (of sorts), the psychopathic deviate scale was the highest average peak in each of the criminality studies. The studies reflected the predictive utility of the MMPI in distinguishing delinquent from non-delinquent populations (Ashbaugh, 1953; Ball, 1962; Capwell, 1945; and, Jurjevich, 1963; Rowley and Stone, 1962; Rempel, 1958; and Stone and Rowley, 1963); and response to treatment (Randolph, Richardson and Johnson, 1961; Lauber and Dahlstrom, 1953). The MMPI studies with prisoners reflecting the same predictive utility of the psychopathic deviate scale concentrated on similar typologies -- i.e., classification of traits of criminal behavior (Panton, 1959, 1962a and 1962b; Clark, 1952; Miller and Hannum, 1962; Wolf, Freinek, and Shaffer, 1969; Swenson and Grimes, 1958; and Wattron, 1958; and outcome of treatment (Cabeen and Coleman, 1961).

Consistency in trait patterns of criminality borne out by the psychopathic deviate scale, as well as the discriminant efficiency of the nine other MMPI scales with all the sub-clinical groups reported in Lanyon's provided the springboard for Goldberg's (1965, 1970, 1972) theoretical development and cross-validation of his three stage predictor profile index rules.

Goldberg's Three Stage Predictor Profile Index Rules

Goldberg based his study on the assumption that there was practical utility to be derived from the use of group data. Using the 293 non-duplicated group profiles from Lanyon's review, Goldberg

hypothesized that he could develop a sequential diagnostic classification of gross behavior: (1) normal versus deviant, (2) psychiatric versus sociopathic, and (3) psychotic versus neurotic. He felt this could be accomplished by serially applying 11 MMPI scales, using step-wise multiple regression analyses against the stated gross criterion. Of the 293 non-duplicated group profiles in Lanyon's Handbook, Goldberg could only use 233. It was not possible to use the others for several reasons, including lack of profile and validity scales. The group profiles researched contained complete data for the same 11 MMPI scales -- L, F, K, HS, D, HY, Pd, Pa, Pt, Sc and Ma.

Goldberg classified 208 group profiles into five categories:

1. Psychotic (N=22). This category included paranoid schizophrenics and acute and chronic psychotics.
2. Neurotic (N=19). This category included conversion hysterics, anxiety neurotics, hypochondriacs, and reactive depressives.
3. Sociopathic (N=41). This category included alcoholics, narcotic addicts, sex offenders, homosexuals, male and female delinquents, and habitual and non-habitual criminals.
4. Mixed psychiatric (N=48). This category included schizophrenic patients on Promazine, hospitalized psychiatric groups, psychoneurotics, psychotics, psychosomatic cases, and patients undergoing shock therapy.
5. Normal (N=78). This category included actors, art students, gifted adolescents, ministers, medical students, and pregnant women.

Two other categories, totaling 25 groups, were deleted from study: (1) medical (N=21), groups with complaints such as ulcers;

low back pain; obesity; aphasia; epilepsy; cerebral palsy; and multiple sclerosis; and (2) faking (N=4), normal persons faking illnesses,

First Stage Predictor Index: Normal versus
Deviant Classification (Hs+2Pd-Ma)

The 208 groups were then further categorized, dichotomously, as normal (N=78); and deviant (N=130), including the categories, 1 through 4, described above. Based on stepwise multiple regression analysis, the 11 MMPI scales and the dichotomous normal versus deviant categories, Goldberg evolved a prediction formula: Hs+2Pd-Ma.

This first stage predictor in a point-biserial correlation coefficient between the first stage predictor and the normal versus deviant dichotomous classification group was .80 (N=208). The mean score for the normal group was 110 (S.D. = 5). By contrast, the mean score for the subgroups of the deviant samples were: neurotics = 141 (S.D. = 7), psychotics = 136 (S.D. = 14), mixed psychiatric = 137 (S.D. = 16), and sociopaths = 140 (S.D. = 9).

Using the scores attained from the formula, Goldberg rank ordered all the groups. He included the medical groups with a mean score of 128 and S.D. of 12. He asserted that by using a cutting score between 123 and 124 only four deviant and none of the normal groups were misclassified.

Second Stage Predictor Index: Psychiatric versus
Sociopathic Classification (2Pd-Hy-Sc)

The analyses employed for the development of the first stage predictor index were similarly used to derive this second stage predictor index, the formula 2Pd-Hy-Sc.

The resulting point biserial correlation coefficient with the second stage predictor and the dichotomous criterion classification of psychiatric versus sociopathic was .86. The N for this coefficient was 82 groups.

The mean score and standard deviation for the 42 sociopathic groups was 24 and 8, respectively. The psychiatric groups yielded the following scores: neurotics = -10, S.D. = 9; psychotic groups = -2, S.D. = 8; and a mean of 0 and S.D. of 9 for the mixed psychiatric groups. Goldberg reported that "none of the psychiatric groups produced scores higher than 15, and none of the sociopathic groups produced scores lower than 5" (p. 124).

Based on the formula scores, the cutting score of 10 was imposed when these 82 groups were rank ordered. This cutting score resulted in the misclassification of two sociopathic groups and two psychiatric groups.

Third Stage Predictor Index: Neurotic versus Psychotic Classification (L+Pa+Sc-Hy-Pt)

The Lanyon Handbook profiles afforded Goldberg the opportunity to cross-validate his third stage predictor which he had developed in an earlier work. The third stage predictor index formula, an unweighted combination of five scales developed, is: L+Pa+Sc-Hy-Pt.

In a study designed to test the accuracy of clinical as opposed to actuarial judgments, Goldberg (1965) used 861 MMPI profiles from seven different clinical settings. The criterion of diagnosis was classifying a patient as psychotic or neurotic. Goldberg's findings revealed that the linear combination of L+Pa+Sc-Hy-Pt significantly

outperformed thirteen Ph.D.'s and sixteen clinical psychology trainees, and equalled or outperformed sixty-five diagnostic signs.

Although the results of the 1965 study were cross-validated in other works, Goldberg used the 1972 study to cross-validate group profiles using the third stage predictor developed from individual data.

The predictive efficiency of the third stage predictor in the 1965 study was .44. In the 1972 study, the resulting point-biserial correlation coefficient between scores on the predictor index and the dichotomous criterion classification of psychosis versus neurosis, was .83. The mean score of the psychotic group was 67 with a standard deviation of 12. Conversely, the mean score of the neurotic groups was 37 with a standard deviation of 7. Rank ordering of all 233 groups resulted in one psychotic group and three neurotic groups being misclassified, when a cutting score of 45 was used. Figure 1 depicts the hierarchical classification for emotional disorders that Goldberg hypothesized to predict through the use of the three predictor index.

Goldberg also analyzed the formulae using a simultaneous classification procedure, based on the linear multiple discriminant function. The hit rates (the number of profiles accurately classified by the formulae) attained through this method for the first, second, and third stage predictors were 98, 95 and 90 percent, respectively.

The highly significant findings prompted Goldberg to suggest that "group data appear to contain such a high signal-noise ratio that they become extraordinarily efficient indicators of underlying processes -- processes which are normally obscured by the unreliability inherent in individual profiles."

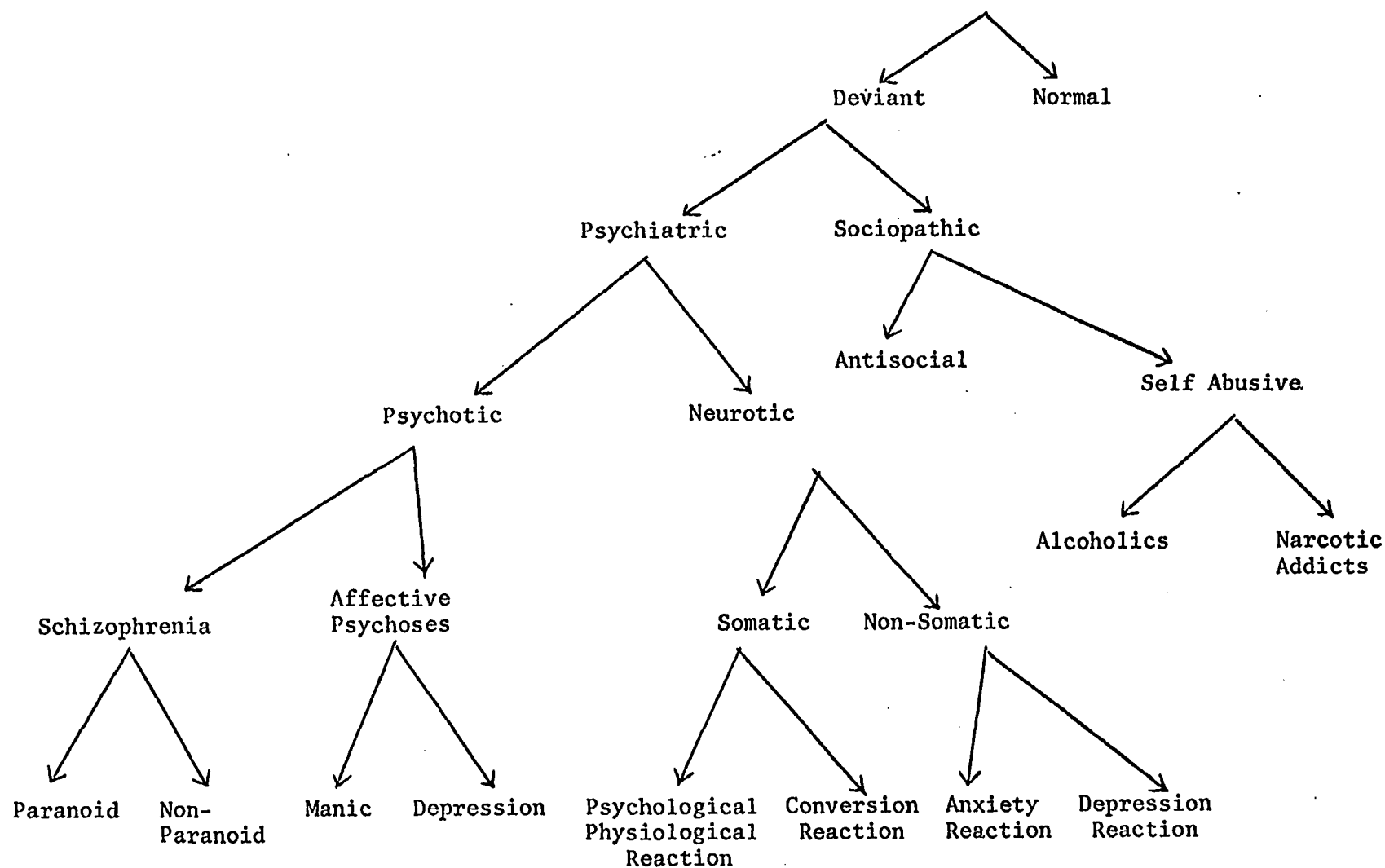


Figure 1. Goldberg's Hierarchical Classification System for Psychiatric Diagnosis.

Research on Goldberg's Profile Index Rules

Nichols (1974) reported his results of Goldberg's profile index rules as applied to two other MMPI typology coding systems. One system consisted of the 16 Marks and Seeman profile types for females developed from the profiles of 441 emotionally disturbed subjects. The 19 Gilberstadt and Duker coding system, developed from profiles of 266 veterans (all males), composed the second code type analyzed. Nichols concluded that in the use of both the sequential and simultaneous application of Goldberg's rules, the formulas yielded a significantly "high degree of congruence between formula classifications and modal diagnoses."

CHAPTER II

STATEMENT OF THE HYPOTHESES

Robert Levinson (1972), Director of Mental Health Services for the Bureau of Prisons, in Washington, D. C. has stated that Goldberg's MMPI results might have some applicability to federal prison populations. The literature, reviewed in Chapter I has indeed underscored the fact that there is a lack of empirical research on the relationship between emotional illness and criminal behavior, particularly in terms of the use of the MMPI.

The purpose of this present investigation, consequently, was to apply the Goldberg formulae to individual MMPI profiles of federal prisoners to assess the accuracy of judgment of the formulae as opposed to the behavioral judgments made by clinicians of the same population.

To study this problem, a special group of men -- known as observation and study cases -- convicted of federal crimes and committed to the Federal Reformatory, El Reno, Oklahoma prior to sentencing served as the subjects. Vold (1935) stressed the importance of using prediction methods to aid the courts and penal institutions.

Prior to a criminal court judge rendering a verdict in a case, he or she has several essential pieces of information, bits of a

puzzle, about the accused that can help in the decision-making process.

These pre-sentencing factors were outlined by Dubienski (1972):

- 1) The degree of premeditation involved;
- 2) The circumstances surrounding the actual commission of the offense, that is, the manner in which it was committed, the amount of violence employed, whether or not an offensive weapon was used; the degree of participation of the offender;
- 3) The gravity of the crime committed in regard to which the maximum punishment provided by the statute as an indication;
- 4) The attitude of the offender after the commission of the offense, as this serves to indicate to some extent the degree of criminology involved and throws some light on the character of the participant;
- 5) The previous criminal record, if any, of the offender;
- 6) The age, mode of life, character and personality of the offender;
- 7) Any pre-sentence report or any mitigating or other circumstances brought to the attention of the court;
- 8) The motive of the crime, the provocation, if any, the family background, the present status of the accused; the mental health of the accused; any reports pertaining to his social behavior; the relation of this offense to the accused's own life and community; the relation of this offense to society generally and its frequency and probably the most important, what facilities are available in penal institutions, or on probation for the possible rehabilitation of the accused.

Observation and Study Commitments

When a person has entered a guilty plea, a plea of nolo contendere or has had a guilty verdict rendered for a federal crime, the judge may, prior to sentencing, request a scientific examination if more exact knowledge about the case is required. Such a special provisional commitment is known as an observation and study sentence.

Usually, an observation and study (hereafter abbreviated O and S) commitment is ordered when extenuating circumstances prevail or in instances where motivations are not apparent. The judge can commit such an offender to a federal facility for a stated period of time in order, hopefully, to have some of the causative factors unravelled. Smith (1962) has emphasized that "the primary aim in the application of the O and S procedures was to aid the court in the determination of the best possible course of treatment for the individual offender under study."

Four types of O and S commitments are available to the Federal Courts:

1. Mental Competency to Stand Trial (Title 18 of the United States Code of Crimes and Criminal Procedure (U.S.C.), Section 4244. (Subjects committed under this procedure were not considered for this study. The reason being that the primary question in such a commitment is one of competency to stand trial). In the other types of O and S commitments the questions all relate to causative factors after conviction, along with possible treatment and a recommendation for sentencing deposition of the case.

2. Youth and Young Adult Offenders (Title 18 U.S.C., Section 5010(e)). Enacted on September 30, 1950 the law is stated as follows:

If the court desires additional information as to whether a youth offender will derive benefit from treatment....it may order that he be committed to the custody of the Attorney General for observation and study at an appropriate classification center or agency. Within sixty days from the date of the order, or such additional period as the court may grant, the Division shall report to the court its findings.

Youthful offenders committed under this provision are usually between the ages of 22 and 26. Section 4 of Public Law 85-752 (1958) extended procedures, however, for such a commitment to young adult offenders through age 25. Additionally, youthful offenders under age 22 can be committed under the Youthful Corrections Act (18 U.S.C. 5010(b)).

All persons committed under these procedures have had little or no prior serious delinquency or prior commitment to any correctional institution.

3. Adult Offenders (Title 18 U.S.C. 4208(b)). This commitment procedure has provided:

If the court desires more detailed information as a basis for determining the sentence to be imposed, the court may commit the defendant to the Attorney General, which commitment shall be deemed to be for the maximum sentence of imprisonment prescribed by law....The results of the study, together with any recommendations which the Director of the Bureau of Prisons believes would be helpful in determining the disposition of the case, shall be furnished to the court within three months unless the court grants time, not to exceed an additional three months, for further study. After receiving such reports and recommendations, the court may in its discretion: (1) place the prisoner on probation as authorized, or (2) affirm the sentence of imprisonment originally imposed, or reduce the sentence of imprisonment, and commit the offender under any applicable provision of law.

When a man or woman is committed under this O and S procedure, the findings usually serve to augment the existing pre-sentence report investigation. In other words, the O and S report is a more intense, detailed and in-depth study of the previously completed pre-sentence report.

4. Juvenile Offenders (Title 18, U.S.C. 5034, as amended

March 31, 1962). This procedure has stipulated:

If the court desires more detailed information as a basis for determining whether to place any juvenile delinquent on probation or to commit him to the custody of the Attorney General for observation and study to an appropriate classification center or agency. The Director of the Bureau of Prisons, under such regulations as the Attorney General may prescribe, shall, after the delinquent has been so committed, cause a complete study to be made of the delinquent, including a mental and physical examination, to ascertain his personal traits, his capabilities, pertinent circumstances of his social background, any previous delinquency or criminal experience, any mental or physical defect or other factor contributing to his delinquency, and any other factors which the Director may consider pertinent. A full and complete report of the results of such study, together with any recommendations which the Director believes would be helpful to the court in making its determination, shall be furnished to the court by the Director within sixty days after the date such delinquent is ordered committed to the custody of the Attorney General under this paragraph unless the court grants additional time for further study.

Hypotheses

For this present investigation six hypotheses are suggested for testing:

1. The predictor profile index (Hs+2Pd-Ma) will significantly discriminate between normal and deviant groups of offenders committed for observation and study.
2. The predictor profile index (2Pd-Hy-Sc) will significantly discriminate between psychiatric and sociopathic groups of offenders.
3. The predictor profile index (L+Pa+Sc-Hy-Pt) will significantly discriminate between psychotic and neurotic groups of offenders.

committed for observation and study.

4. There will be a significant agreement between each of the three predictor profile indices and the original diagnoses, by clinicians, of observation and study cases.

5. There will be a significant agreement between each of three predictor profile indices and the original diagnoses, by clinicians, of observation and study cases examined by type of offense.

6. There will be a significant agreement between each of the predictor profile indices and the original diagnoses, by clinicians, of observation and study cases examined by racial groups.

CHAPTER III

METHOD

Subjects

All Observation and Study cases in this study were assigned to the Federal Reformatory, El Reno, Oklahoma.

The mental status report on an O and S commitment id done by a prison clinician -- i.e., a psychiatrist, Ph.D. psychologist or by a psychology trainee -- one assigned to handle each O and S case.

To begin with, each O and S prisoner is given the same battery of psychological tests administered to each prisoner committed under regular U.S.C. Rules and Procedures. The standard battery of tests consist of the Beta IQ test, the Draw-A-Person projective test, and the MMPI. Whereas prisoners committed under traditional procedures are given this battery of tests and are the subjects of periodic reports on their adjustment and adaptability to life within the institution as well as efforts aimed at their rehavilitation; O and S cases, by law, have to have whatever psychological tests needed to enable the clinician to evaluate thoroughly the court's questions.

Two points concerning the pyschological evaluation were of primary interest for this research. First, was the MMPI profile. Secondly, and what, basically, makes this O and S group suitable for

the application of Goldberg's rules, was the accompanying clinical impression given by the clinician at the conclusion of each detailed report of all pertinent clinical findings necessary to help the court understand the nature of the psychological processes evoking the manifest behavior under study. The clinical impression for each prisoner was required by the Bureau of Prisons Office, and had to be compatible with a diagnosis listed in the Diagnostic and Statistical Manual of Mental Disorders (1967).

O and S case reports conducted at El Reno during the years 1971 and 1972, inclusive, were selected for study for three reasons: (1) the different types of O and S commitments were enacted into law beginning in 1950, as previously stated. However, it had been only during the years 1971 and 1972 that El Reno had had committed the largest number of O and S cases. More specifically, O and S prisoners whose files remained at the institution intact; (2) there was during this two-year period a cross-section of professionally trained clinicians involved in O and S evaluations and case report write-ups. It was concluded by the author that clinicians with diverse backgrounds, in terms of professional training, would be of greater significance from a research viewpoint, than one or two clinicians, of similar training having diagnosed all of the cases; and (3) the year 1972 was the last year that the Bureau of Prisons Office officially required a clinical impression in conjunction with a psychological report.

A preliminary investigation indicated that one hundred and forty (140) O and S prisoners were committed to El Reno during the years 1971 and 1972. Table 1 is a breakdown of all cases conducted at

Table I

Type and Number of Observation and Study Cases Committed to El Reno
During the Years 1971 and 1972

Year	FJDA-5034	YCA-5010(e)	S.4208(b)	Total
1971	1 ¹ (0) ²	36 (32)	24 (17)	61 (49)
1972	<u>4 (4)</u>	<u>55 (44)</u>	<u>20 (12)</u>	<u>79 (60)</u>
	5 (4)	91 (76)	44 (29)	140 (109)

¹Number of cases conducted at El Reno.

²Number of cases used for this study.

El Reno, by type O and S commitment and year committed, during the two-year period. The figures in parentheses reflect the actual number of cases used in this study.

Thirty-one (31) cases were deleted from the study for one of the following reasons:

1. Incomplete MMPI scores and/or background data on the subject was missing (10 cases).
2. The clinical impression was not compatible with Goldberg's rules. All cases involved a diagnosis of mental retardation (3 cases).
3. Subject had been released from federal prison at the completion of his O and S commitment period. Or, subject had completed a further sentence imposed after the O and S commitment period was concluded. In both instances, the case file was no longer active and had been turned over to the Bureau of Prisons Archives in Washington, D.C. (18 cases).

Demographic Data

The average age of all 109 subjects was 22.9 years, with the age of the 1971 group averaging 23.6 while the mean age of the 1972 group was 22.5 years. All ages were based on age at the time of sentencing for the federal offense under study.

The mean ages of the subjects committed as FJDA, YCA and Adult was 18.3, 21.9, and 24.3 years of age.

Of the total group, 84 were White (77.1 percent) and they averaged 22.5 years of age; 23 subjects were Black (21.1 percent) averaging 21.5 years of age. The two (1.8 percent) remaining subjects were Native Americans with an average age of 24.6 years.

The citizenship of two of the subjects could not be determined. The other 107 subjects were all citizens of the United States. Most were residing in the central part of the United States at the time of their arrest and over half (56.9 percent) were arrested for the present offense in the same state in which they were born.

An analysis of the educational attainment level of the group reflected that 45 percent of the group had completed some level of high school training (grades 9-11). 26.6 percent of the subjects were either high school graduates or held the General Education Development (GED) diploma. Varying levels of college training was attained by 17.4 percent, while only two of the subjects (both White) had completed college.

The educational picture shifts somewhat when the subjects' level of education is examined by race. White prisoners compared quite favorably with the percentages cited above for the group as a whole. Black subjects were quite similar as well to the overall group. However, there was only one Black subject who had acquired some college education (one-half a semester to three years). The level of schooling completed for the Native American subjects was quite a sharp contrast from the group as a whole. Neither subject went beyond grade 8. (see Appendix A, Educational Level of Attainment for O and S Subjects).

The kind of occupations (see Appendix B, Occupation at Time of Arrest), in which the prisoners were involved, at the time of arrest, were evenly split between skilled and unskilled labor. This split in skill was relatively constant for both Whites and Blacks, with the White subjects having a slightly higher percentage of skilled labor

jobs and Black subjects tending to hold more unskilled jobs. However, the difference in these statistics for the two groups were not significant. The Native American subjects both held unskilled labor jobs. Approximately one fourth of the subjects had formed some kind of bond with another person. 21.3 percent were married while another 13 percent were either separated or divorced. The remaining 63.0 percent were single (see Appendix C, Marital Status of Observation and Study Offenders).

Sixty-three subjects had no prior military history. Of the remaining 45 subjects (on whom such information was available) who had served in the military, the average length of time served was approximately two years. 48.9 percent of those 45 subjects had been terminated from the service with honorable discharges. Another 20 percent had either general or medical discharges. The rest of them either had "other than honorable" discharges or had not been discharged at the time of the present offense (see Appendix D, Type of Military Discharge of Observation and Study Offenders).

Past Criminal Record Data

Fourteen subjects (12.8 percent) had no arrest record prior to the present arrest and commitment. The other 95 (87.2 percent) each had an average of 6.5 prior arrests (with a range of 1 to 45 prior arrests), although only 22.1 percent of the 95 had ever been committed previously -- this percentage does not include the prisoner with a history of 45 prior arrests! The 21 prisoners (with an average of 17.3 years at the time of his first arrest) with prior commitments had been committed an average of 1.4 times (with a range of 1 to 4

commitments). The longest time served on a previous commitment averaged thirteen (13) months. Prior to this O and S commitment for the present offense the average subject had been out of prison an average of three years.

Appendix E lists a complete breakdown of prior commitments of the subjects. It should be noted that the record of previous arrests and commitments were significantly similar for both White and Black subjects. The Native American subjects averaged 18.5 prior arrests with no commitments for one subject and three for the other.

Only one of the twenty-one prisoners with prior commitment records had been incarcerated in a federal prison facility. The other twenty had spent one or two terms in either a local or state prison.

Representation of Sample to All Observation and Study Cases

During the fiscal years 1971 and 1972, a total of 603 men were committed as Observation and Study cases to young adult institutions for males (Federal Bureau of Prisons Statistical Report, 1971 and 1972). Accordingly, the 140 cases at El Reno represented 23.2 percent of all cases conducted during the two-year period. Deleting those cases not applicable for research, the El Reno group comprised 18.1 percent of all O and S cases for the two years.

Consequently, this group was considered representative of the total population of young adult male O and S cases committed to federal prisons during 1971 and 1972.

There were no tables released by the Bureau of Prisons related to the proportion of O and S cases committed to federal prisons by race. However, the total number of prisoners, between the ages of 22

and 25 years of age, committed to federal prisons (Federal Bureau of Prisons Statistical Report, 1971 and 1972) during the stated two-year period, was 2,341. The percentages that Whites, Blacks, and Native Americans represented of this total group were 72.1, 25.2, and 2.5. The racial make-up of the sample group for this study (White = 77.1 percent; Black = 21.1 percent; and, Native American = 1.8 percent) were relatively comparable to the racial composition of all offenders, of similar ages, committed to federal facilities during the same period.

Based on the percentages cited above of the sample group to other relevant populations, this research group was considered representative. Necessarily, generalizations to the total population of O and S cases will be deemed appropriate.

Procedure

Data for the subjects was obtained from two sources: (1) the prison central files for information concerning each prisoner's past and present criminal record; as well as background data including personal, social, family, marital, educational, occupational, and military histories. Bureau of Prison forms 6 and 7 (see Appendices, F, G) maintained in each man's central file "jacket" contained the background information just cited. Also located in the central files is the clinician's report on the mental and emotional status of the offender, a copy of which is submitted to the court. It was from each of these reports that the clinical impression of the subject was taken.

Except for race and age, background data was available on only 108 of the 109 subjects. And (2) the medical records Bureau of

Prisons form 8 (see Appendix H) which contained all MMPI scale scores. The MMPI scale scores were available and complete for all 109 subjects

All clinical impressions on psychological or psychiatric reports were listed sometimes with multiple diagnoses. In such instances, Bureau of Prison format as well as principles of psychological reporting have dictated that the predominating, and/or most serious (psychodynamically) factor underlying and contributing to the manifest criminal behavior be listed first as the primary diagnosis.

In twenty-four (24) cases there was a secondary diagnosis. It was concluded by the author that a secondary diagnosis was indicative of a disorder necessitating equal treatment priority in conjunction with the primary diagnosis, or was a symptomatic expression of the primary diagnosis.

In three (3) instances, there was a tertiary diagnosis. For clarity, such a diagnosis would be interpreted in a manner similar to that given secondary diagnosis. A tertiary diagnosis would further suggest, however, a condition that was as dynamically significant a factor, but from a cause-and-effect relationship viewpoint, not as compelling a factor of criminal behavior as would be the primary and secondary diagnoses.

Each original clinical diagnosis (primary, secondary and tertiary) was then classified for research purposes. Tables II, III, IV, list the classifications used for the primary, secondary and tertiary diagnoses, respectively. The Diagnostic and Statistical Manual of Mental Disorders (1968) was used as a guide in classifying the diagnoses made by the clinicians.

Table II
Group Classification of Clinicians' Primary Diagnoses
of the Offenders

<u>Classification</u>	<u>N</u>
<u>Normal</u>	47
1. No mental disorder	25
2. Adjustment reaction of adolescence	10
3. Adjustment reaction of adult life	7
4. Social maladjustment without manifest psychiatric disorder	4
5. Dyssocial behavior	1
 <u>Sociopathic</u>	 54
1. Passive-aggressive personality disorder	20
2. Antisocial personality disorder	14
3. Inadequate personality	9
4. Immature personality	3
5. Drug dependence (unspecified)	2
6. Passive dependent personality	2
7. Drug dependence (barbituate)	1
8. Alcoholic addiction	1
9. Group delinquency reaction of adolescence	1
10. Cyclothymic personality (hypomaniac type)	1
 <u>Neurotic</u>	
1. Anxiety neurosis	3
2. Hysterical neurosis, slight tendencies	1
3. Phobic neurosis	1
 <u>Psychotic</u>	
1. Acute schizophrenic reaction	1
2. Schizophrenia, latent type	1
3. Schizophrenia, childhood type (probably in remission)	1
 Total	 109

Table III
Group Classification of Secondary Diagnoses of
The Offenders Made by Clinicians

<u>Classification</u>	<u>N</u>
<u>Sociopathic</u>	17
1. Antisocial traits or features	10
2. Drug dependence, unspecified	4
3. Antisocial personality	2
4. Inadequate personality	1
 <u>Neurotic</u>	 4
1. Depressive neurosis (including overtones of)	2
2. Hysterical neurosis, slight tendencies, conversion type (Belle Indifference)	1
3. Hypochondriacal neurosis	1
 <u>Psychotic</u>	
1. Psychosis (unspecified)	2
a. underlying tendencies to decompensate emotionally (acute psychoses 5 years earlier) 1 case	
b. minimal capacity to relate adequately to the stresses and strains of daily living. Decompensated mental capacity. 1 case.	
2. Schizophrenia, latent type	1
Total	24

Table IV
Group Classification of Tertiary Diagnoses of the
Offenders Made by Clinicians

<u>Classification</u>	<u>N</u>
<u>Sociopathic</u>	
1. Antisocial personality (including asocial personality)	2
2. Drug dependence (unspecified)	1
Total	<u>3</u>

The resulting dichotomous classifications of behavior based on the original diagnoses were as follows:

1. Normal (46 cases) vs. Deviant (63 cases)
2. Sociopathic (55 cases) vs. Psychiatric (8 cases)
3. Neurotic (5 cases) vs. Psychotic (3 cases)

Similarly, the present offense for which each prisoner was sentenced was classified into one of three groups: (1) Group I-Drug Laws; (2) Group II-Violent Crimes Against Persons; and (3) Group III-Crimes Against Property and Other. Table V lists the group classification of present offenses.

The level of training of the clinicians was a determining factor in their classification. There were eight clinicians divided into three categories: (1) psychiatrists-3; (2) Ph.D. psychologists-2, and (3) psychology interns-3. Table VI lists the categories of clinicians and the number of cases diagnosed.

The MMPI scale scores were keyed to each of the predictor profile index formulae. (See Appendix I for the complete list of MMPI scale and resulting formula scores).

Hypotheses I, II and III were tested by computing point biserial correlations for each of the profile index formula results and the dichotomous categories of diagnoses as determined by the clinicians.

Hypotheses IV, V and VI were tested through the computation of tests of significance for nominal data.

The design, for all statistical analyses, were based on the Statistical Package for the Social Sciences (1970). All data and statistics defined and coded for the computer system on the diagnostic grouping of behaviors by the clinicians.

Table V
Group Classification of the Present Offense of
Observation and Study Cases by Race

	<u>White</u>	<u>Black</u>	<u>Native American</u>	<u>Total</u>
<u>GROUP I</u>				
<u>Drug Laws</u>				
1. Marijuana	19	3	0	22
2. Narcotics	17	2	0	19
3. Dangerous drugs	<u>5</u>	<u>0</u>	<u>0</u>	<u>5</u>
	41	5	0	46
 <u>GROUP II</u>				
<u>Violent Crimes Against Persons</u>				
1. Kidnap and Rape	0	1	0	1
2. Robbery	5	3	0	8
3. Assault (District of Columbia)	0	2	0	2
4. Homicide (District of Columbia)	<u>0</u>	<u>1</u>	<u>0</u>	<u>1</u>
	5	7	0	12
 <u>GROUP III</u>				
<u>Crimes Against Property and Other</u>				
1. Counterfeit	0	1	0	1
2. Embezzlement and Fraud	4	0	0	4
3. Firearms	4	2	1	7

TABLE V - cont'd.

	<u>White</u>	<u>Black</u>	<u>Native American</u>	<u>Total</u>
<u>GROUP III - cont'd.</u>				
<u>(Larceny/Theft)</u>				
4. Motor Vehicle, Interstate	17	2	0	19
5. Postal	2	0	0	2
6. Postal with Forgery	1	1	0	2
7. Theft, Interstate	3	1	0	4
8. Other	1	0	0	1
9. National Security Laws	1	0	0	1
10. Selective Service Act	0	1	0	1
11. Security, Transporting False or Forged	1	2	0	3
12. Other Unclassified	1	1	0	2
a.1. threatening letters sent through the U.S. Mail				
b.2. bond jumping				
<u>Government Reservation, High Seas, Territorial and District of Columbia</u>				
13. Auto Theft	1	0	0	1
14. Burglary	0	0	1	1
15. Larceny/Theft	1	0	0	1
16. Other and Unclassified	1	0	0	1
	<u>38</u>	<u>11</u>	<u>2</u>	<u>51</u>

Table VI
Number of Cases Diagnosed by Type of Clinician

Classification of Clinician (N)		<u>White</u>		<u>Black</u>		<u>Native American</u>		<u>Total</u>	
1.	Psychiatrist (3)	37	(44)	13	(56.6)	1	(50)	51	(46)
2.	Ph.D. Psychologist (2)	25	(30)	5	(21.7)	0	(0)	30	(28)
3.	Psychology Interns (3)	22	(26)	5	(21.7)	1	(50)	28	(26)
		84	(100)	23	(100.0)	2	(100)	109	(100)

CHAPTER IV

RESULTS

The first three hypotheses centered on the utility of the predictor profile indices to significantly discriminate between the three dichotomous groups of behavior manifested by the group of offenders under study. The results were as follows:

1. Normal versus deviant offenders using the first-stage predictor profile index (Hs+2Pd-Ma). The hypothesis was supported. Using the cutting score of 124 the formula discriminated between normal and deviant groups of offenders. Thirty-six (36) subjects were classified as normal with a mean score of 107 (SD = 12). The remaining subjects (73) were classified as deviant. The mean score of the deviant group was 150 (SD = 19). Appendix I lists the formula results for all subjects. The mean and standard deviation results closely approximate those mean score findings of Goldberg's study group.

2. Sociopathic versus psychiatric offenders using the second-stage predictor profile index (2Pd-Hy-Sc). The hypothesis was supported. Of the seventy-three (73) subjects classified deviant by the first-stage index, forty-six (46) were classified as sociopathic (with a mean score of 33 and a SD = 15), while it classified twenty-seven (27) subjects as psychiatric (mean score equalling -3, and

SD = 14). The cutting score for this index was 10 and none of those subjects classified as psychiatric scored above this number. The mean index scores of the sociopathic and psychiatric groups on the first stage prediction profile index were 148, SD = 20, and 153, SD = 18, respectively. These results reflected Goldberg's findings that the more severe the pathology, the greater the difference in the mean scores of the first formula.

3. Neurotic versus psychotic offenders using the third-stage predictor profile index (L+Pa+SC-Hy-Pt). This hypothesis was also supported. A cutting score of 45 was used with this index. The twenty-seven (27) psychiatric subjects were further classified, by the third-stage index, as either neurotic or psychotic. The neurotic group (N=4) produced a mean score of 36 (SD = 6). Contrastingly, the psychotic group mean results were 66 with a SD = 15. The deviant index score for the neurotic group was 145 (SD = 14), while the deviant index score for the psychotic group was the highest produced by any group with a mean of 155 and a SD = 18). Table VII lists the mean scores which resulted for each group for all three indices.

The MMPI scale scores for the group of 109 subjects are profiled in Figure 2. Figure 3 profiles the scale scores for the subjects by race.

The fourth hypothesis tested:

4. Agreement between each of the three predictor profile indices and the original diagnoses, as determined by prison clinicians of offenders. This hypothesis was statistically tested with the point biserial correlation. The hypothesis was not supported.

Table VII
Behavioral Classification of Subjects Based on
Predictor Profile Index Results

<u>Group</u>	<u>N</u>	<u>Formula I</u> <u>Mean</u>	<u>Formula II</u> <u>Mean</u>	<u>Formula III</u> <u>Mean</u>	<u>SDI</u>	<u>SDII</u>	<u>SDIII</u>
Normal	(36)	107	8	52	12	15	20
Deviants	(73)	150	20	55	19	22	20
Sociopathic	(46)	148	33	54	20	15	20
Psychiatric	(27)	153	-3	61	18	14	18
Neurotic	(4)	145	7	36	14	4	6
Psychotic	(23)	155	-5	66	18	16	15

PLEASE NOTE:

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quest of author. Available for
consultation at The University of
Oklahoma Library.

UNIVERSITY MICROFILMS.

The correlation coefficient which resulted for the first-stage predictor and diagnoses made by clinicians was .05 for the 109 subjects. This correlation yielded a significance level of .61 ($p > .05$). This result was interpreted as being indicative of very little congruency in the classification of behaviors by the clinicians and the predictors (see Table VIII). Figure 4 reveals the differences in the classification of the offenders to the broad dichotomous normal and deviant groups.

A chi square test of independence was computed to determine the significance of differences between the normal and deviant groups as labelled by both the clinical and predictor method. The null hypothesis of no difference between the group was not rejected.

The correlation of coefficient between the sixty-three (63) subjects the clinicians diagnoses as either sociopathic versus psychiatric and the second-stage predictor was -.05 (attaining a significance level of .70) and was interpreted as a statistically non-significant result. The correlation coefficient of -.05 indicated no agreement. The formula scores obtained by the sociopathic and psychiatric groups, as determined by the clinicians, were inverse to the scores predicted in Goldberg's research, and the resulting mean scores of this group independent of the diagnoses. Figure 5 shows the distribution of subjects by both methods for this part of the hypothesis. The number of cases involved in the computation of this coefficient was determined by the number of subjects diagnosed sociopathic by the clinicians -- in this instance 55. The profile index, correspondingly classified 46 subjects as sociopathic. Figure 5 indicates that with

Table VIII

Point Biserial Correlation Coefficients Between the Predictor Profile Indices
and the Diagnosticians for all Observation and Study Cases

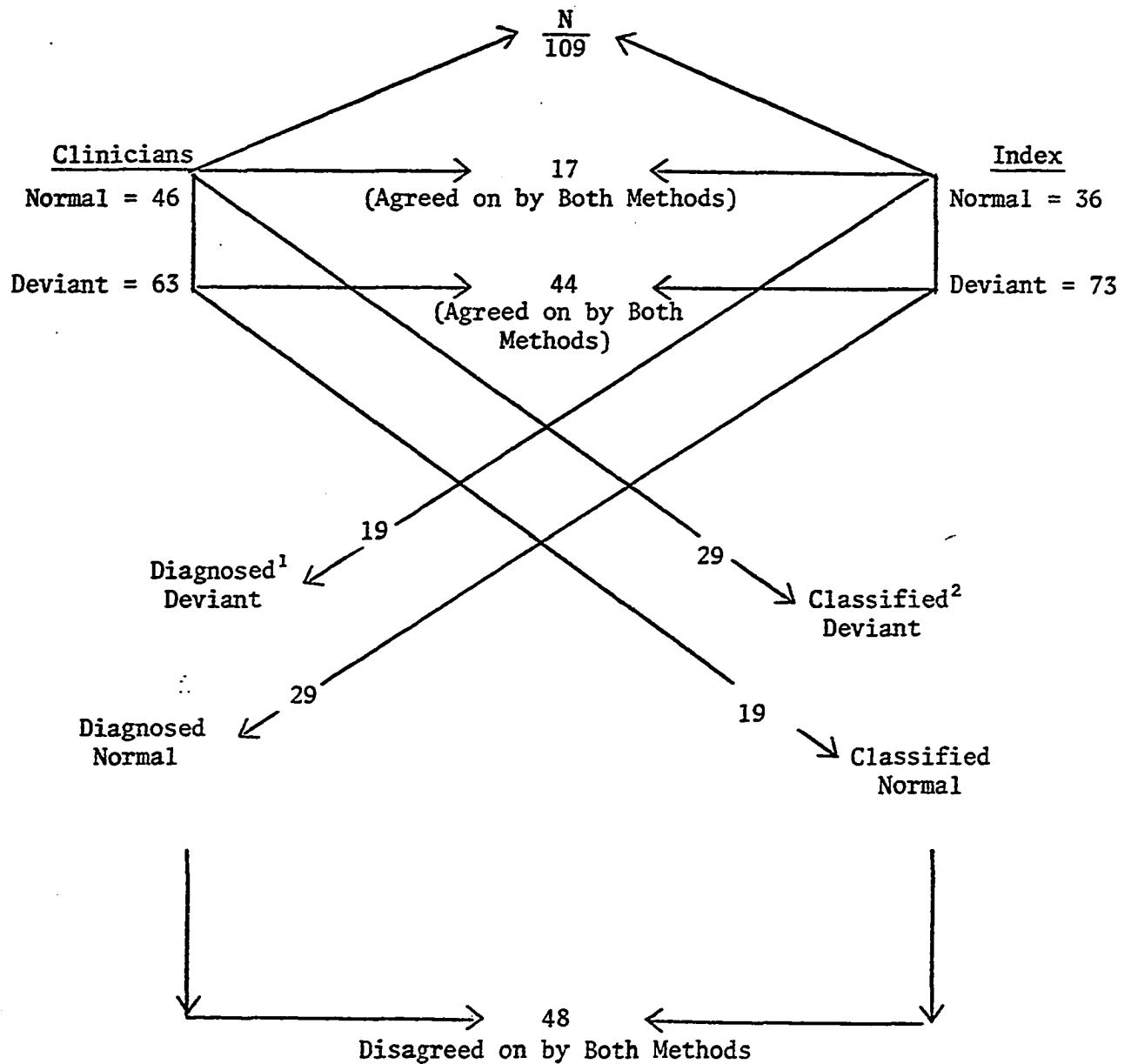
	Profile Index I	Profile Index II	Profile Index III
Normal vs. Deviant Diagnosis	.045 (N=109) S ¹ -.614		
Sociopathic vs. Psychiatric Diagnosis		-.05 (N=63) S=.699	
Neurotic vs. Psychotic Diagnosis			.76* (N=8) S=.029

¹S refers to significance level.

*p > .05.

Figure 4.

Normal and Deviant Classification Distribution of Subjects
As Determined by First Stage Predictor Profile Index
(Hs+2Pd-Ma) and the Diagnoses of Clinicians

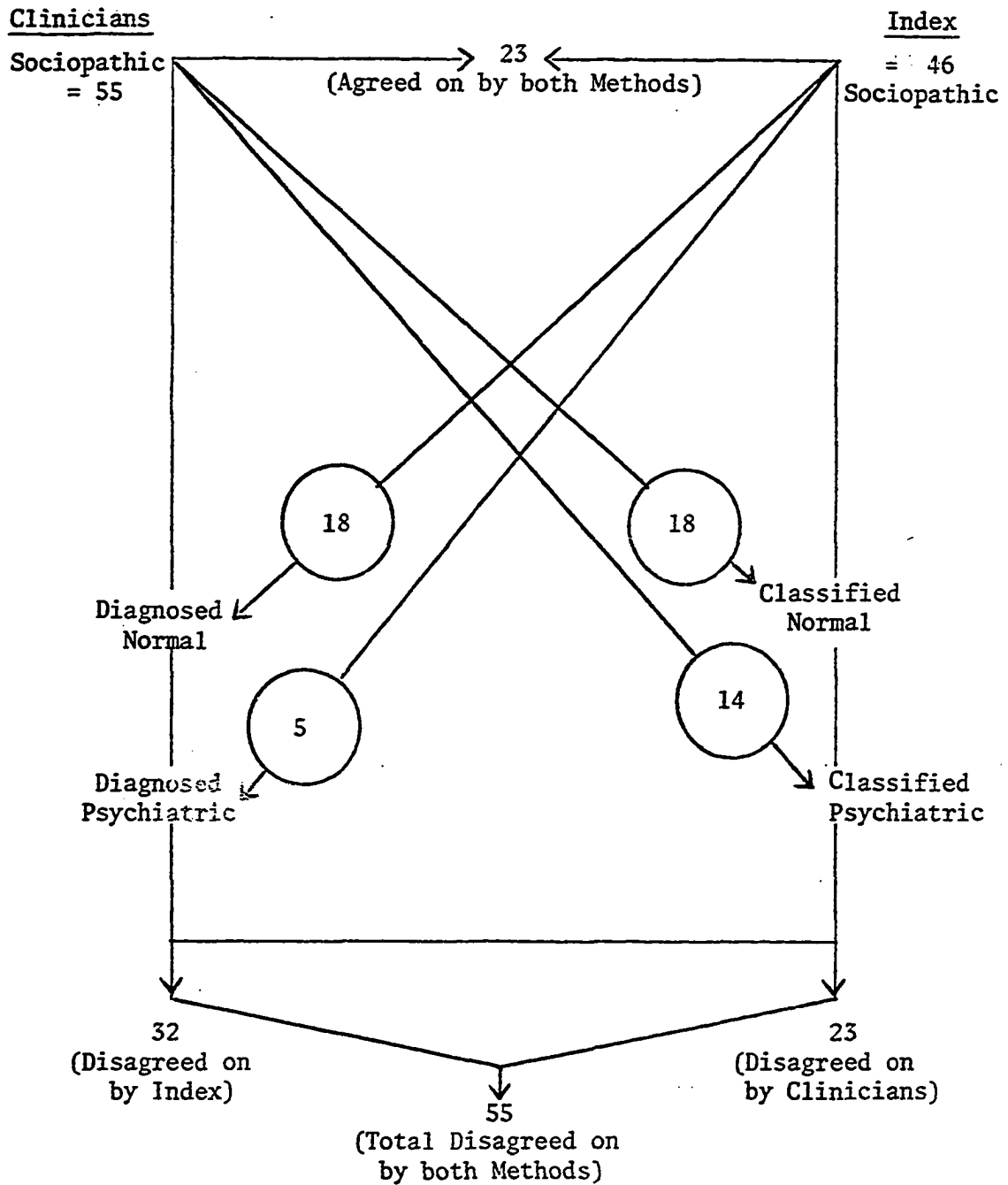


¹Diagnosed refers to clinicians assessment of subject's personality.

²Classified refers to predictor profile index results.

Figure 5

Distribution of Fifty-Five Offenders Diagnosed Sociopathic by Clinicians and Forty-Six Offenders Classified Sociopathic by Predictor Profile Index (2Pd-Hy-Sc)



seventy-eight (78 non-duplicated sociopathic cases the clinicians agreed with the index on only 23 cases (29 percent), while they disagreed on 78 subjects (71 percent). Figure 6 shows the distribution of thirty-three (33) non-duplicated cases labelled psychiatric by both methods. Clinicians and the index agreed on only two subjects. The other 31 were labelled differently. The null hypotheses for the chi square test of independence in labelling of sociopathic and psychiatric groups by both methods was not rejected.

On the neurotic versus psychotic continuum, the resulting correlation coefficient, for the eight (8) subjects diagnosed as psychiatric by the clinicians and the third stage predictor profile index (L+Pa+Sc-Hy-Pt), was .76. This correlation coefficient was beyond the .05 level of significance. The point biserial correlation coefficient is inflated, however, because the computation of the correlation is based on the eight cases diagnosed by clinicians. The formula scores for these eight cases had been classified by the indices as either sociopathic (5 cases), normal (1 case), psychotic (1 case) -- this case was diagnosed as neurotic. Only one case was agreed upon as being neurotic (see Figures 7 and 8). Necessarily, computing a chi-square test of independence of differences between the neurotic and psychotic groups resulted in a lack of rejection of the null hypothesis. It is of import for research, however, that the chi-square did approach the .10 level of significance.

Table IX lists the means of the formulae based on the diagnostic grouping of behaviors by the clinicians.

Figure 6.
 Distribution of Eight Offenders Diagnosed Psychiatric by
 Clinicians and Twenty-Seven Offenders Classified
 Psychiatric by Predictor Profile Index
 (2Pd-Hy-Sc)

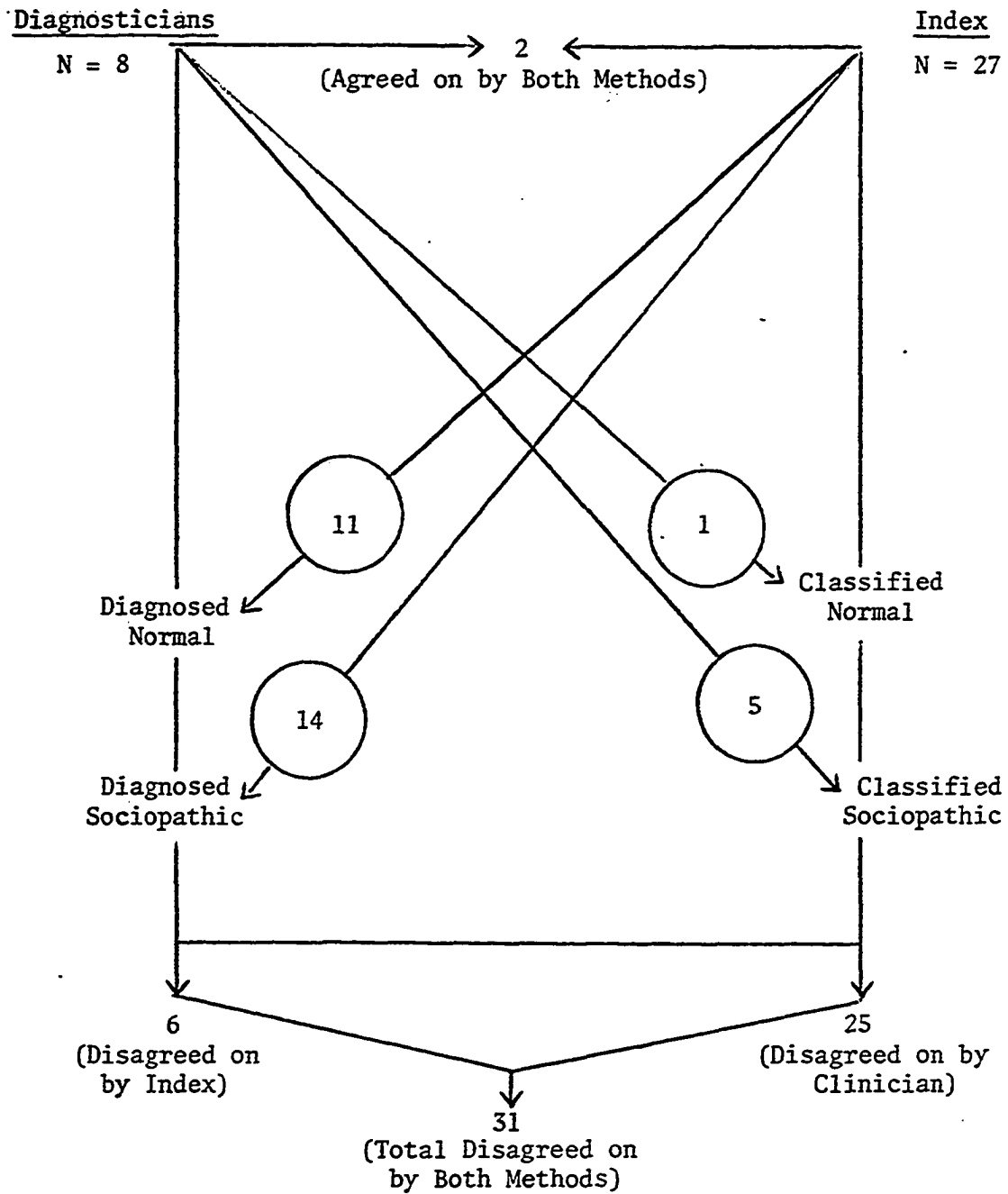


Figure 7.

Distribution of Five Offenders Diagnosed Neurotic by Clinicians
and Four Offenders Classified Neurotic by Predictor
Profile Index (L+Pa+Sc-Hy-Pt)

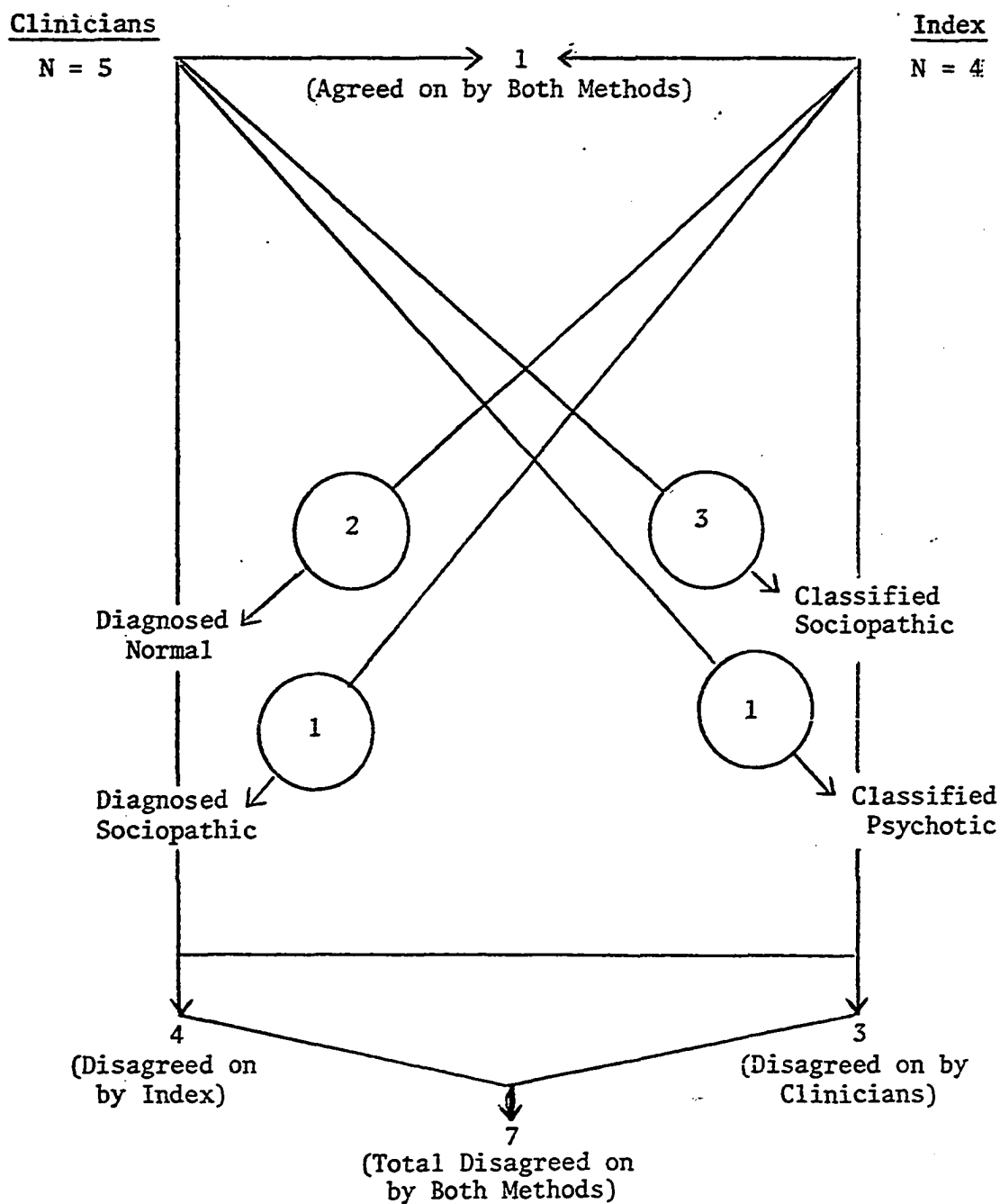


Figure 8.

Distribution of Three Offenders Diagnosed Psychotic by Clinicians
and Twenty-Three Classified Psychotic by Predictor Profile
Index (L+Pa+Sc-Hy-Pt)

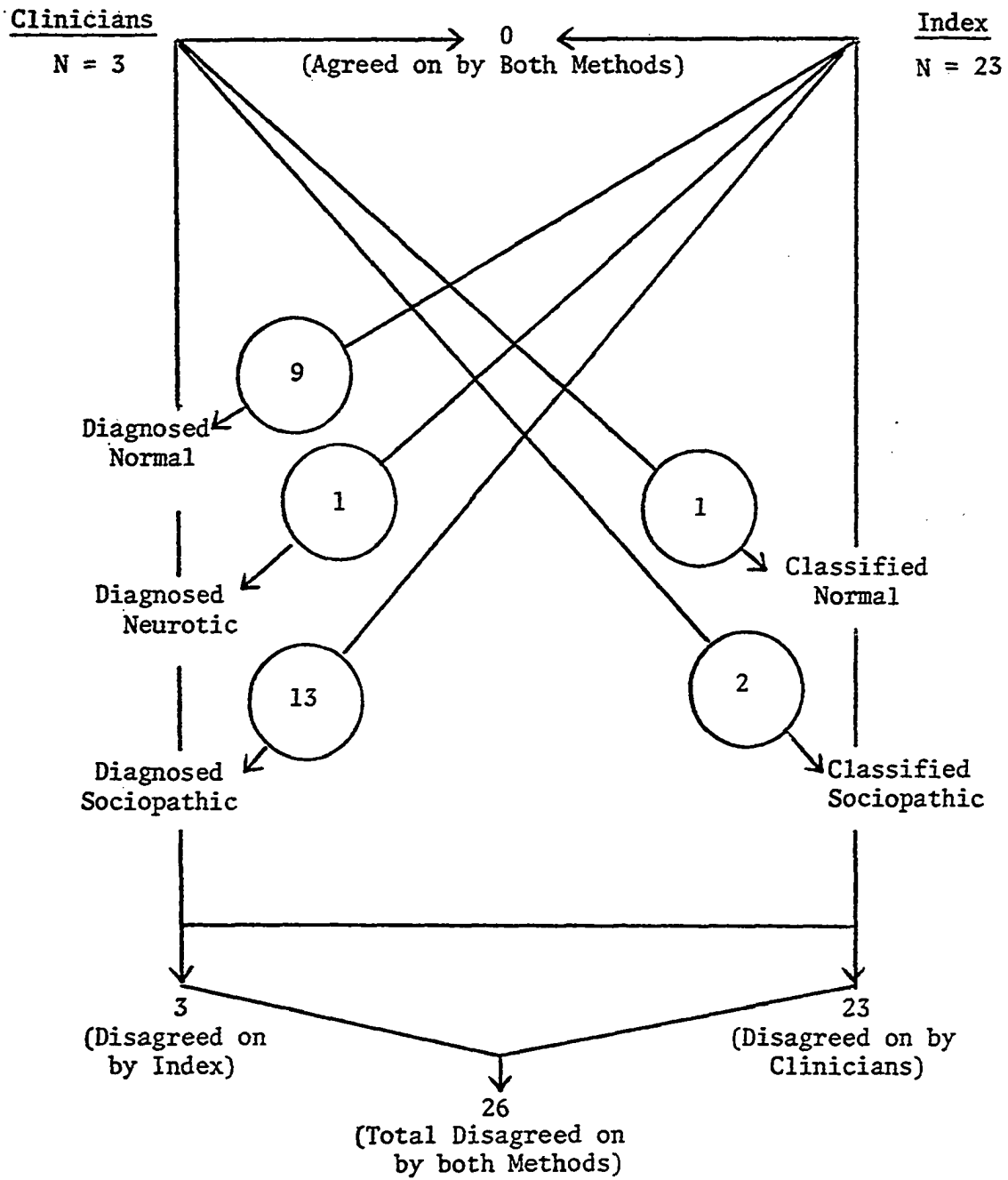


Table IX
Predictor Profile Index Means and Standard Deviations
Based on Clinical Diagnoses

<u>Group</u>	<u>N</u>	<u>Formula I</u> <u>Mean</u>	<u>Formula II</u> <u>Mean</u>	<u>Formula III</u> <u>Mean</u>	<u>SDI</u>	<u>SDII</u>	<u>SDIII</u>
Total	(109)	136	16	54	27	21	19
Normal	(46)	134	12	55	27	22	20
Deviant	(63)	137	19	56	26	20	19
53 Sociopathic	(55)	136	19	58	27	21	19
Psychiatric	(8)	145	16	48	22	13	17
Neurotic	(5)	150	10	39	11	11	11
Psychotic	(3)	137	27	63	6	6	13

The fifth hypothesis concerned:

5. Agreement between each of the three predictor profile indices and the original diagnoses made by the clinicians of observation and study cases by the type of offense for which each was committed. The point biserial coefficient was calculated to test this hypothesis. The resulting coefficients did not reach significant levels. Thus, the hypothesis was not supported. Tables, X, XII and XIV contain the correlation coefficients for each of the three classes of crimes under which O and S offenders were committed. Tables XI, XIII and XV list the means and standard deviations for each of the diagnosed groups. These formula means do not approximate nor reflect a systematic distinction between normal to psychotic groups as Goldberg suggests they should. The scores are, instead, high for normal groups or groups with minimal psychopathy, and low for groups labelled as manifesting a significant degree of psychopathy -- thus, the correlation coefficients were non-significant.

The last hypothesis analyzed:

6. Agreement between each of the predictor profile indices and the diagnoses, of clinicians, of the study group examined by racial background. Similar to the other hypotheses, the point biserial correlation coefficients did not reach significant levels. The hypothesis was not supported. The significantly high correlation between Profile Index III and the Neurotic versus Psychotic Diagnosis (.76) for White subjects in Table XVI is explained the same as the similarly high correlation for the total group of subjects. The chi-square hypothesis of no difference with this dichotomous group using both methods was not

Table X

Point Biserial Correlation Coefficients Between the Prediction Profile Indices
and the Diagnosticians for Observation and Study Cases Classified by
Type I Offense (Drug Laws)

	Profile Index I	Profile Index II	Profile Index III
Normal vs. Deviant Diagnosis	.18 (N=46) $S^1=.223$		
Sociopathic vs. Psychiatric Diagnosis		-.15 (N=20) $S=.519$	
Neurotic vs. Psychotic Diagnosis			.82 (N=4) $S=.184$

¹S refers to significance level.

Table XI

Predictor Profile Index Means and Standard Deviations Based on Clinical
Diagnoses for Type I Offense Observation and Study Cases

<u>Group</u>	<u>N</u>	<u>Formula I</u> <u>Mean</u>	<u>Formula II</u> <u>Mean</u>	<u>Formula III</u> <u>Mean</u>	<u>SDI</u>	<u>SDII</u>	<u>SDIII</u>
Total	(46)	131	13	51	24	18	15
Normal	(26)	127	12	51	24	20	14
Deviant	(20)	136	15	51	24	16	16
Sociopathic	(10)	134	17	52	26	17	17
Psychiatric	(4)	145	11	49	20	12	11
Neurotic	(3)	150	6	45	22	10	8
Psychotic	(1)	131	13	51	*	*	*

Table XII
 Point Biserial Correlation Coefficients Between the Predictor Profile Indices
 and the Diagnosticians for Observation and Study Cases Classified by
 Type II Offense (Violent Crimes)

	Profile Index I	Profile Index II	Profile Index III
Normal vs. Deviant Diagnosis	-.21 (N=12) $S^1=.512$		
Sociopathic vs. Psychiatric Diagnosis		99.000 ² (N=7) S=****	
Neurotic vs. Psychotic Diagnosis			99.000 (N=0) S=****

¹S refers to significance level.

²99.000. This value indicates a coefficient could not be computed.

Table XIII
 Predictor Profile Index Means and Standard Deviations Based on Clinical
 Diagnoses for Type II Offense Observation and Study Cases

<u>Group</u>	<u>N</u>	<u>Formula I</u> <u>Mean</u>	<u>Formula II</u> <u>Mean</u>	<u>Formula III</u> <u>Mean</u>	<u>SDI</u>	<u>SDII</u>	<u>SDIII</u>
Total	(12)	139	-1	60	33	16	20
Normal	(5)	147	-5	49	34	20	19
Deviant	(7)	133	1	68	34	14	18
5 8 Sociopathic	(7)	133	1	68	34	14	18
Psychiatric	(0)	-	-	-	-	-	-
Neurotic	(0)	-	-	-	-	-	-
Psychotic	(0)	-	-	-	-	-	-

Table XIV

Point Biserial Correlation Coefficients Between the Predictor Profile Indices
and the Diagnosticians for Observation and Study Cases Classified by
Type III Offense (Crimes Against Property and Other)

59

	Profile Index I	Profile Index II	Profile Index III
Normal vs. Deviant Diagnosis	-.08 (N=51) S ¹ =.593		
Sociopathic vs. Psychiatric Diagnosis		-.04 (N=36) S=.822	
Neurotic vs. Psychotic Diagnosis			.85 (N=4) S=.153

¹S refers to significance level.

Table XV

Predictor Profile Index Means and Standard Deviations Based on Clinical
Diagnoses for Type III Offense Observation and Study Cases

<u>Group</u>	<u>N</u>	<u>Formula I</u> <u>Mean</u>	<u>Formula II</u> <u>Mean</u>	<u>Formula III</u> <u>Mean</u>	<u>SDI</u>	<u>SDII</u>	<u>SDIII</u>
Total	(51)	139	22	59	27	21	22
Normal	(15)	143	18	64	29	23	25
Deviant	(36)	138	24	57	26	21	21
Sociopathic	(32)	137	24	58	26	22	20
Psychiatric	(4)	144	22	47	27	12	23
Neurotic	(2)	149	15	30	13	13	11
Psychotic	(2)	140	29	64	45	8	18

Table XVI
 Point Biserial Correlation Coefficients Between the Predictor Profile Indices
 and the Diagnosticians for Observation and Study Cases Classified by
 Race (White Subjects)

	Profile Index I	Profile Index II	Profile Index III
Normal vs. Deviant Diagnosis	.05 (N=84) $S^1 = .624$		
Sociopathic vs. Psychiatric Diagnosis		-.10 (N=48) $S = .491$	
Neurotic vs. Psychotic Diagnosis			.76 ² (N=8) $S = .029$

¹S refers to significance level.

²p < .05.

rejected. The correlation coefficients are listed in Tables XVI, XVIII and XX with Tables XVII, XIX and XXI revealing the scatter in behavioral group mean scores.

The level of agreement attained by the clinicians, as opposed to the predictor profile indices, was not one of the original hypotheses. It was felt, however, that the predictive efficiency of the indices compared with the level of training of clinicians was crucial to any conclusions reached after analyzing the results. The level of agreement between indices and behavioral diagnoses as determined by the psychiatrists and psychology trainees were similar to results of the hypotheses, i.e., there were no significant results (see Tables XXII, XXIII, XXVI and XXVII).

Contrastingly, the level of agreement of Ph.D. psychologists for the diagnoses of the normal versus deviant dichotomy and that of the first-stage predictors was significant beyond the .05 level of significance (see Table XXIV). A glance at the mean scores for the normal and deviant groups (Table XXV) can explain readily the significant correlation coefficient. Despite the fact that the mean score for the normal group does not fall into the cutoff category designated by Goldberg, it approaches it very favorably. Consequently, the degree to which misclassifications would be made, in contrast to the index classifications, would be expected to be minimal. Results for the second and third-stage predictors with the appropriate diagnoses were non-significant.

The ranked scores resulting from each of the index formulas and the original diagnoses were printed out in Tables XXVIII, XXIX and

rejected. The correlation coefficients are listed in Tables XVI, XVIII and XX with Tables XVII, XIX and XXI revealing the scatter in behavioral group mean scores.

The level of agreement attained by the clinicians, as opposed to the predictor profile indices, was not one of the original hypotheses. It was felt, however, that the predictive efficiency of the indices compared with the level of training of clinicians was crucial to any conclusions reached after analyzing the results. The level of agreement between indices and behavioral diagnoses as determined by the psychiatrists and psychology trainees were similar to results of the hypotheses, i.e., the significant results (see Tables XXII, XXIII, XXVI and

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The ranked scores resulting from each of the index formulas and the original diagnoses were printed out in Tables XXVIII, XXIX and

	Profile Index I	Profile Index II	Profile Index III
Normal vs. Deviant Diagnosis	.05 (N=84) S ² = .624		
Sociopathic vs. Psychiatric Diagnosis		-.10 (N=48) S ² = .491	
Neurotic vs. Psychotic Diagnosis			.76 ² (N=8) S ² = .029

¹S refers to significance level.

²p < .05.

Table XVII

Predictor Profile Index Means and Standard Deviations Based on Clinical
Diagnoses for Observation and Study Cases Classified by Race
(White Subjects)

<u>Group</u>	<u>N</u>	<u>Formula I</u> <u>Mean</u>	<u>Formula II</u> <u>Mean</u>	<u>Formula III</u> <u>Mean</u>	<u>SDI</u>	<u>SDII</u>	<u>SDIII</u>
Total	(84)	135	17	53	26	22	19
Normal	(36)	134	12	54	29	22	20
Deviant	(48)	137	21	53	24	21	19
Sociopathic	(40)	135	22	54	25	23	19
Psychiatric	(8)	145	16	48	22	13	17
Neurotic	(5)	150	10	39	17	11	11
Psychotic	(3)	137	27	63	32	6	13

Table XVIII
 Point Biserial Correlation Coefficients Between the Predictor Profile Indices
 and the Diagnosticians for Observation and Study Cases Classified by
 Race (Black Subjects)

	Profile Index I	Profile Index II	Profile Index III
Normal vs. Deviant Diagnosis	.0008 (N=23) $S^1 = .99$		
Sociopathic vs. Psychiatric Diagnosis		99.000 ² (N=13) S=****	
Neurotic vs. Psychotic Diagnosis			99.000 (N=0) S=****

¹S refers to significance level.

²99.000. This value indicates a correlation coefficient could not be computed.

Table XIX
 Predictor Profile Index Means and Standard Deviations Based on Clinical
 Diagnoses for Observation and Study Cases Classified by Race
 (Black Subjects)

<u>Group</u>	<u>N</u>	<u>Formula I</u> <u>Mean</u>	<u>Formula II</u> <u>Mean</u>	<u>Formula III</u> <u>Mean</u>	<u>SDI</u>	<u>SDII</u>	<u>SDIII</u>
Total	(23)	136	11	64	31	16	19
Normal	(10)	136	12	57	24	20	19
Deviant	(13)	136	10	69	36	12	17
Sociopathic	(13)	136	10	69	36	12	17
Psychiatric	(0)	-	-	-	-	-	-
Neurotic	(0)	-	-	-	-	-	-
Psychotic	(0)	-	-	-	-	-	-

Table XX

Point Biserial Correlation Coefficients Between the Predictor Profile Indices
and the Diagnosticians for Observation and Study Cases Classified by
Race (Native Americans)

	Profile Index I	Profile Index II	Profile Index III
Normal vs. Deviant Diagnosis	99.000 ¹ (N=2) S=****		
Sociopathic vs. Psychiatric Diagnosis		99.000 (N=2) S=****	
Neurotic vs. Psychotic Diagnosis			99.000 (N=0) S=****

¹99.000. This value indicates a correlation coefficient could not be computed.

Table XXI
 Predictor Profile Index Means and Standard Deviations Based on Clinical
 Diagnoses for Observation and Study Cases Classified by Race
 (Native Americans)

<u>Group</u>	<u>N</u>	<u>Formula I</u> <u>Mean</u>	<u>Formula II</u> <u>Mean</u>	<u>Formula III</u> <u>Mean</u>	<u>SDI</u>	<u>SDII</u>	<u>SDIII</u>
Total	(2)	149	22	70	0	28	15
Normal	(0)	-	-	-	-	-	-
Deviant	(2)	149	22	70	0	28	15
Sociopathic	(2)	149	22	70	0	28	15
Psychiatric	(0)	-	-	-	-	-	-
Neurotic	(0)	-	-	-	-	-	-
Psychotic	(0)	-	-	-	-	-	-

Table XXII
 Point Biserial Correlation Coefficients Between the Predictor Profile Indices
 and Diagnoses Made by Psychiatrists for Observation and Study Cases.

	Profile Index I	Profile Index II	Profile Index III
Normal vs. Deviant Diagnosis	-.08 (N=51) $S^1=.570$		
Sociopathic vs. Psychiatric Diagnosis		-.06 (N=38) $S=.705$	
Neurotic vs. Psychotic Diagnosis			.93 (N=3) $S=.237$

¹S refers to significance level.

Table XXIII
 Predictor Profile Index Means and Standard Deviations Based on Clinical
 Diagnoses of Psychiatrists for Observation and Study Cases

<u>Group</u>	<u>N</u>	<u>Formula I</u> <u>Mean</u>	<u>Formula II</u> <u>Mean</u>	<u>Formula III</u> <u>Mean</u>	<u>SDI</u>	<u>SDII</u>	<u>SDIII</u>
Total	(51)	134	14	59	28	22	20
Normal	(13)	137	5	63	31	22	23
Deviant	(38)	132	17	57	27	21	19
Sociopathic	(35)	131	17	57	27	21	19
Psychiatric	(3)	147	21	57	21	14	19
Neurotic	(1)	140	6	38	0	0	0
Psychotic	(2)	151	29	69	28	7	10

Table XXIV
 Point Biserial Correlation Coefficients Between the Predictor Profile Indices
 and Diagnoses Made by Ph.D. Psychologists for
 Observation and Study Cases

	Profile Index I	Profile Index II	Profile Index III
Normal vs. Deviant Diagnosis	.44 ¹ (N=30) S ² =.014		
Sociopathic vs. Psychiatric Diagnosis		-.07 (N=11) S=.847	
Neurotic vs. Psychotic Diagnosis			99.000 ³ (N=1) S=****

¹Correlation coefficient significant beyond the .05 level of significance.

²S refers to significance level.

³ 99.000. This value indicates a correlation coefficient could not be computed.

Table XXV

Predictor Profile Index Means and Standard Deviations Based on Clinical
Diagnoses Made by Ph.D. Psychologists for Observation and Study Cases

<u>Group</u>	<u>N</u>	<u>Formula I</u> <u>Mean</u>	<u>Formula II</u> <u>Mean</u>	<u>Formula III</u> <u>Mean</u>	<u>SDI</u>	<u>SDII</u>	<u>SDIII</u>
Total	(30)	136	18	54	25	22	20
Normal	(19)	128	11	50	21	20	17
Deviant	(11)	150	28	60	24	29	24
Sociopathic	(10)	149	29	64	26	23	22
Psychiatric	(1)	158	24	22	-	-	-
Neutotic	(1)	158	24	22	-	-	-
Psychotic	(0)	-	-	-	-	-	-

Table XXVI
Point Biserial Correlation Coefficients Between the Predictor Profile Indices and
Diagnoses Made by Psychology Trainees for Observation and Study Cases

	Profile Index I	Profile Index II	Profile Index III
Normal vs. Deviant Diagnosis	-.03 (-28) S ¹ =.924		
Sociopathic vs. Psychiatric Diagnosis		-.26 (N=14) S=.379	
Neurotic vs. Psychotic Diagnosis			.46 (N=4) S=.541

¹S refers to significance level.

Table XXVII

Predictor Profile Index Means and Standard Deviations Based on Clinical
Diagnoses Made by Psychology Trainees for Observation and Study Cases

<u>Group</u>	<u>N</u>	<u>Formula I</u> <u>Mean</u>	<u>Formula II</u> <u>Mean</u>	<u>Formula III</u> <u>Mean</u>	<u>SDI</u>	<u>SDII</u>	<u>SDIII</u>
Total	(28)	139	18	53	28	19	17
Normal	(14)	140	19	54	32	22	19
Deviant	(14)	138	16	52	25	15	16
Sociopathic	(10)	138	18	54	26	16	18
Psychiatric	(4)	140	10	46	27	12	7
Neurotic	(3)	150	6	45	22	10	8
Psychotic	(1)	108	23	51	-	-	-

Table XXVIII
Primary Diagnosis
Distribution of Normal and Deviant Scores
Ranked on Hs+2Pd-Ma Index

O and S Subject	Index Mean	Original Diagnostic Impression of Clinician	Classification of Diagnosis
90-2Y3 ¹	203	Inadequate Personality	S ²
98-1Z3	200	Adjustment Reaction to adolescence	O
72-2X2	192	Antisocial Personality, severe	S
1-2X2	183	No Mental Disorder	O
85-1X3	181	Passive-Aggressive Personality Disorder	S
7-1X3	179	Adjustment Reaction of Adolescent Life	O
4-1Z3	177	No Mental Disorder	O
10-1Z1	175	Anxiety Neurosis	E
45-1X1	174	Antisocial Personality Disorder	S
97-1X1	174	Passive-Aggressive Personality Disorder	S
81-1Z1	172	No Mental Disorder	O
3-1X3	171	Schizophrenia, Childhood type, probably in remission	P
83-1Z3	169	Adjustment Reaction of Adolescence	O
64-1Y3	169	Inadequate Personality	S
105-1Z1	167	Drug Dependence	S
103-1X2	165	Passive-Dependent Personality	S
68-1X3	164	Antisocial Personality	S
66-1X1	164	Adjustment Reaction of Adolescence	O
58-1Y2	164	No Mental Disorder	O
62-2X3	162	Group Delinquency Reaction of Adolescence	S
61-1Z1	161	No Mental Disorder	O
109-1Y3	161	Inadequate Personality	S
92-2Z3	161	Antisocial Character Disorder	S
54-1Y3	159	Passive-Aggressive Personality	S
48-2Y2	158	Adjustment Reaction of Adolescence	O
35-1Y3	158	Anxiety Neurosis	E
89-1X3	158	Adjustment Reaction of Adolescence	O
74-1Y3	158	Inadequate Personality	S

Table XXVIII-cont'd.

O and S Subject	Index Mean	Original Diagnostic Impression of Clinician	Classification of Diagnosis
65-1Z1	156	Drug Dependence	S
28-1X1	155	Adjustment Reaction of Adult Life	0
91-2X3	155	Antisocial Personality Disorder	S
33-1Z3	149	Antisocial Personality	S
21-3Z3	149	Alcoholic Addiction	S
2-3X3	149	Inadequate Personality	S
53-1Y1	148	No Mental Disorder	0
78-1X1	146	No Mental Disorder	0
34-1Y1	145	No Mental Disorder	0
27-1X1	144	Passive-Aggressive Personality Disorder	S
63-1Z1	144	Drug Dependence	S
49-1X3	144	Passive-Aggressive Personality	S
80-1Y3	144	No Mental Disorder	0
12-1Y1	142	Social Maladjustment without manifest psychiatric disorder	0
8-2Y3	141	No Mental Disorder	0
25-2X3	141	Adjustment Reaction of Adolescence	0
15-1X3	140	Phobic Neurosis (claustrophobia)	E
102-1Y3	140	Antisocial Personality, Mild	S
104-2Z1	139	Adjustment Reaction of Adult Life	0
29-1Z1	139	Anxiety Neurosis	E
16-2Z3	138	No Mental Disorder	0
94-1Y1	137	Adjustment Reaction of Adult Life	0
20-1Y2	136	Adjustment Reaction of Adult Life	0
55-1X1	136	Passive-Aggressive Personality Disorder	S
59-1Z1	136	Slight tendencies toward hysterical neurosis	E
30-2X1	134	No Mental Disorder	0
38-1Z1	134	Immature Personality	S
9-1X3	133	Passive-Aggressive Personality Disorder, Passive-Aggressive Type	S
101-2X2	133	Inadequate Personality Disorder	S
77-1X1	133	Passive-Aggressive Personality Disorder	S
99-1Z1	132	No Mental Disorder	0

Table XXVIII-cont'd.

<u>O and S Subject</u>	<u>Index Mean</u>	<u>Original Diagnostic Impression of Clinician</u>	<u>Classification of Diagnosis</u>
52-1X3	132	Antisocial Personality Disorder	S
37-1X3	131	Passive-Aggressive Personality Disorder, Passive-Aggressive Type	S
42-1X1	131	Acute Schizophrenic Reaction	P
43-1Z1	128	No Mental Disorder	0
44-1X2	128	Passive-Aggressive Personality Disorder, Passive-Aggressive Type	S
11-1Y3	128	Antisocial Personality Disorder	S
93-1Y3	128	No Mental Disorder	0
26-1Y3	127	Cyclothymic Personality (Hypomanic Type)	S
88-2Y3	126	Inadequate Personality	S
82-1X1	126	Drug Dependence (barbituates)	S
95-1Z3	125	No Mental Disorder	0
51-1Z1	124	Passive-Aggressive Personality	S
23-1X3	124	Antisocial Personality Disorder	S
6-1Y1	122	Social Maladjustment without manifest psychiatric disorder	0
17-1Y3	121	Inadequate Personality	S
31-1Y3	120	Adjustment Reaction of Adolescence	0
22-2X3	120	Passive-Aggressive Personality Disorder	S
40-1X3	120	Passive-Dependent Personality	S
36-1X3	120	Passive-Aggressive Personality Disorder	S
76-1X1	120	Passive-Aggressive Personality Disorder	S
106-2Y1	117	No Mental Disorder	0
87-1X1	117	Dysocial Personality	0
86-1Y1	117	Adjustment Reaction of Adult Life	0
5-1X1	115	Adjustment Reaction of Adolescence	0
32-1X3	114	Antisocial Personality	S
96-1Y1	113	No Mental Disorder	0
13-1X1	113	No Mental Disorder	0
60-1Z3	113	No Mental Disorder	0
56-1Z1	112	Inadequate Personality	S
47-2X2	112	Passive-Aggressive Personality Disorder	S
79-1X1	112	Passive-Aggressive Personality Disorder	S

Table XXVIII- cont'd.

<u>O and S Subject</u>	<u>Index Mean</u>	<u>Original Diagnostic Impression of Clinician</u>	<u>Classification of Diagnosis</u>
84-1X3	111	Passive-Aggressive Personality Disorder	S
14-1Y1	109	No Mental Disorder	0
100-1Z3	108	Schizophrenia, Latent Type	P
41-2X3	104	Antisocial Personality Disorder	S
18-2X2	103	Antisocial Personality, Severe	S
107-2Z3	103	No Mental Disorder	0
71-1Y3	101	No Mental Disorder	0
50-2Z1	101	No Mental Disorder	0
57-1Z1	100	Social Maladjustment Without Manifest Psychiatric Disorder	0
108-2X2	99	Immature Personality	S
69-1X3	96	Antisocial Personality Disorder	S
46-2X1	96	Passive-Aggressive Personality Disorder, Passive-Dependent Type	S
24-1X1	94	No Mental Disorder	0
75-1X3	94	Passive-Aggressive Personality	S
19-1Y2	93	Adjustment Reaction to Adult Life	0
39-1X1	86	Adjustment Reaction to Adult Life	0
67-1X3	86	Passive-Aggressive Personality	S
70-1Y1	85	Social Maladjustment Without Manifest Psychiatric Disorder	0
73-1Z1	83	Immature Personality	S

¹90-2Y3. Ex. 90 = identification number of subject

2 = race (2 = Black; 1 = White, and,
3 = Native American

Y = Type clinician who conducted case.

Y = Ph.D. psychologist; X = Psychiatrist; and,

Z = Psychology Trainee.

²S. This letter represents diagnostic classification of original diagnosis.

S = Sociopathic; 0 = Normal; E = Neurotic; and, P = Psychotic.

Table XXIX
Primary Diagnosis
Distribution by Sociopathic and Psychiatric Scores
Ranked on 2Pd-Hy-Sc Index

O and S Subject	Index Mean	Original Diagnostic Impression of Clinician	Classification of Diagnosis
54-1Y3	72	Passive-Aggressive Personality	S
74-1Y3	59	Inadequate Personality	S
49-1X3	58	Passive-Aggressive Personality	S
97-1X1	57	Passive-Aggressive Personality Disorder	S
85-1X3	52	Passive-Aggressive Personality Disorder	S
45-1X1	45	Antisocial Personality Disorder	S
23-1X3	45	Antisocial Personality Disorder	S
21-3Z3	42	Alcoholic Addiction	S
33-1Z3	42	Antisocial Personality	S
102-1Y3	39	Antisocial Personality, Mild	S
37-1X3	38	Passive-Aggressive Personality Disorder, Passive-Aggressive Type	S
9-1X3	35	Passive-Aggressive Personality Disorder, Passive-Aggressive Type	S
3-1X3	34	Schizophrenia, Childhood Type, Probably in Remission	P
62-2X3	33	Group Delinquency Reaction of Adolescence	S
36-1X3	32	Passive-Aggressive Personality Disorder, Passive-Aggressive Type	S
52-1X3	32	Antisocial Personality Disorder	S
26-1Y3	31	Cyclothymic Personality (Hypomanic Type)	S
51-1Z1	28	Passive-Aggressive Personality	S
56-1Z1	27	Inadequate Personality	S
90-2Y3	25	Inadequate Personality	S
35-1Y3	24	Anxiety Neurosis	E
42-1X1	24	Acute Schizophrenic Reaction	P
68-1X3	24	Antisocial Personality	S
55-1X1	23	Passive-Aggressive Personality Disorder	S
100-1Z3	23	Schizophrenia, Latent Type	P
88-2Y3	22	Inadequate Personality	S
17-1Y3	21	Inadequate Personality	S

Table XXIX - cont'd.

O and S Subject	Index Mean	Original Diagnostic Impression of Clinician	Classification of Diagnosis
69-1X3	19	Antisocial Personality Disorder	S
76-1X1	19	Passive-Aggressive Personality Disorder	S
75-1X3	19	Passive-Aggressive Personality	S
46-2X1	18	Passive-Aggressive Personality Disorder, Passive-Dependent Type	S
44-1X2	18	Passive-Aggressive Personality Disorder, Passive-Aggressive Type	S
40-1X3	15	Passive-Dependent Personality	S
79-1X1	15	Passive-Aggressive Personality Disorder	S
73-1Z1	14	Immature Personality	S
64-1Y3	14	Inadequate Personality	S
32-1X3	13	Antisocial Personality	S
29-1Z1	12	Anxiety Neurosis	E
59-1Z1	12	Slight Tendencies Toward Hysterical Neurosis	E
22-2X3	11	Passive-Aggressive Personality Disorder	S
11-1Y3	11	Antisocial Personality Disorder	S
63-1Z1	10	Drug Dependence	S
38-1Z1	10	Immature Personality	S
105-1Z1	10	Drug Dependence	S
92-2Z3	9	Antisocial Character Disorder	S
18-2X2	9	Antisocial Personality, Severe	S
41-2X3	8	Antisocial Personality Disorder	S
101-2X2	8	Inadequate Personality Disorder	S
77-1X1	8	Passive-Aggressive Personality Disorder	S
15-1X3	6	Phobic Neurosis (claustrophobia)	E
47-2X2	3	Passive-Aggressive Personality Disorder	S
72-2X2	2	Antisocial Personality, Severe	S
2-3X3	2	Inadequate Personality	S
84-1X3	1	Passive-Aggressive Personality Disorder	S
27-1X1	0	Passive-Aggressive Personality Disorder	S
109-1Y3	-6	Inadequate Personality	S
10-1Z1	-6	Anxiety Neurosis	E
91-2X3	-8	Antisocial Personality Disorder	S
108-2X2	-8	Immature Personality	S

Table XXIX - cont'd.

<u>O and S Subject</u>	<u>Index Mean</u>	<u>Original Diagnostic Impression of Clinician</u>	<u>Classification of Diagnosis</u>
65-1Z1	-8	Drug Dependence	S
82-1X1	-10	Drug Dependence (barbituates)	S
103-1X2	-25	Passive-Dependent Personality	S
67-1X3	-33	Passive-Aggressive Personality	S

XXX. This table has provided a graphic depiction of the disparity in the range scores and diagnosis. However, the table manifests the minimal misclassification resulting from significant correlation coefficient between the first-stage and the normal deviant diagnoses as determined by Ph.D. psychologists.

All of the above stated hypotheses and analyses were computed for all the secondary as well as tertiary diagnoses made by clinicians. These results were not reported due to the paucity of cases yielding data which could not be computed, or non-significant data.

Table XXX
 Primary Diagnosis
 Distribution by Neurotic and Psychotic Scores
 Ranked on L+Pa+Sc-Hy-Pt Index

<u>O and S Subject</u>	<u>Index Mean</u>	<u>Original Diagnostic Impression of Clinician</u>	<u>Classification of Diagnosis</u>
3-1X3	76	Schizophrenia, Childhood Type, Probably in Remission	P
42-1X1	62	Acute Schizophrenic Reaction	P
29-1Z1	52	Anxiety Neurosis	E
100-1Z3	51	Schizophrenia, Latent Type	P
10-1Z1	45	Anxiety Neurosis	E
15-1X3	38	Phobic Neurosis (claustrophobia)	E
59-1Z1	37	Slight Tendencies Toward Hysterical Neurosis	E
35-1Y3	22	Anxiety Neurosis	E

CHAPTER V

DISCUSSION

The first three hypotheses, testing the predictive efficiency of the Goldberg rules to discriminate between personality traits of observation and study offenders, were supported. The Goldberg rules significantly discriminated between normal versus deviant, sociopathic versus psychiatric, and neurotic versus psychotic dichotomous groups of behaviors. The resulting configurational patterns of the traits of this sample further validated Goldberg's work on the efficiency of the predictor rules with group data.

A profile of the total group as delineated by the Goldberg rules would be that the subjects were defined as manifesting deviancy by a margin of two to one. Almost two-thirds of the deviant group were described as psychiatric -- overwhelmingly psychotic (23 cases) as opposed to neurotic (4).

The last three hypotheses, testing the level of agreement between the Goldberg rules and clinicians (psychiatrists, Ph.D. psychologists, and psychology interns) in classifying behaviors of all subjects, by race and by type of offense committed, were not supported. The clinical impression of the diagnosticians was that the subjects were basically sociopathic, while another large proportion -- almost half --

were diagnosed as normal. Those subjects who did fall into the psychiatric category (8 cases) were described as being more neurotic than psychotic.

The fact that the majority of subjects were classified as "sociopathic" by both methods was where the similarity in the characterization of the group ended, since they jointly agreed on less than half -- (a non-significant finding) of the same subjects so labelled as being "sociopathic."

The discovery that the clinicians diagnosed the overwhelming majority of the O and S offenders as normal or sociopathic, while the predictor profile indices classified the majority of the same subjects as either sociopathic or psychotic was alarming! This finding was disturbing due to the fact that utilizing these two procedures with the grossest of all behavioral classification distinctions -- normalcy versus deviancy -- there was virtually little, if any, agreement! Such a result would probably have been interpreted by the author as a stalemate between the two methods, had it not been for one significant result. The high level of agreement between the Goldberg rules and the Ph.D. psychologists on the normal-deviant dimension was significant beyond the .05 level. This result suggested that both the Goldberg rules and the Ph.D. psychologists probably utilized similar cues and strategies with some degree of consistency. This would seem to suggest favorable predictive utility for the empirical method and predicates need for further investigation using both methods with a similar group of offenders.

Perhaps, a future investigation of the two methods, along the theoretical and empirical line suggested by Dudycha and Naylor (1966), would be of scientific value. These researches emphasized:

humans tend to generate "correct" strategies but then, in turn, fail to use their own strategy with any great consistency....One is left with the conclusion that humans may be used to generate inference strategies but that once the strategy is obtained the humans should be removed from the system and replaced by his own strategy.

It was theorized that one explanation, perhaps, for the high level of agreement between the Ph.D. psychologists and the profile indices was that the psychologists' facility and frequency in using the MMPI resulted in a greater degree of accuracy in determining the psychodynamic processes of the offenders. Conversely, it could be stated that the psychiatrists, as a group, served in a consulting capacity and lacked the accrual of knowledge relating to criminality and personality traits as manifested on the MMPI. One interesting point was that one psychiatrist was not a consultant but a full time staff member at El Reno. This fact that a psychiatrist was on the staff would tend to mitigate against the theory of frequency of use and accuracy stated above -- save one matter. This psychiatrist diagnosed twenty-three (23) offenders as "passive-aggressive personality, passive-aggressive type" without exception. Individually rated, as all of the clinicians were, this psychiatrist's performance was worse than that of the psychology trainees.

The poor showing of the psychology trainees was attributed to level of training and lack of experience in the use of the MMPI as a diagnostic tool.

Granted, of course, that a contingent of the criminal population in this study has been correctly labeled as sociopathic by both methods, the real and far more serious problem remains unresolved. This is the problem of the discrepancy in the labeling of the subjects as normal (by the clinicians) while the Goldberg rules classified the same subjects as psychotic. This discrepancy in the labeling of personality traits has, of course, the greatest implication for the offender so mislabeled.

If the error is made in the direction of labeling the offender as a normal functioning human being he could, theoretically expect to be returned to prison to serve a sentence. More fundamental here is the question of whether such an individual would be considered a target candidate for treatment by mental health personnel based on his "normal" diagnosis. The number of men sentenced to prison and diagnosed as having more serious emotional problems would seem to mitigate against the mislabeled "normal" offender from being singled out for treatment. What is disturbing here is the possibility that such a person could conceivably serve his time quietly and undemonstrably and be considered a model prisoner and released to society still a very sick man.

This sort of misclassification is a striking example of what Sadoff (1971) described as a person who knows how to mask his emotional disturbance through "acting-out" and is adroit in using the criminal-legal process to get himself committed to prison so he can receive treatment. This self-deception, Sadoff reasoned, is utilized because society won't give him the treatment he needs or he won't admit to

himself his real problem. The author would take Sadoff's conclusions a step further and suggest that if the prison clinician is not adept at unmasking the self-deception or uncovering the psychodynamic processes and labels such an individual as normal, it is to some extent tantamount to giving one a license to steal or worse.

The other side of the mislabeling dilemma is the man classified as deviant when in fact he is not. In MMPI parlance this is referred to as "faking bad." Such misclassification is not entirely detrimental if one assumed that a person manifests some sort of aberrant behavior when one commits a crime. In such a situation the offender can expect to be brought into contact with treatment in a controlled environment -- perhaps, for the better. What can be harmful is his chances for shedding the deviant (psychotic) label once released back into society, when, in fact, his chances for a productive, contributing life were, otherwise, quite favorable.

It is stressed here that either error in labeling could prove detrimental for the criminal justice system as well as for the offender. It is for this reason that more research needs to be done with offenders.

The MMPI has become very controversial as a diagnostic instrument. It would appear, however, that with the ever-growing size of the federal prison population some effort will have to be made to computerize the strategies of clinicians for diagnostic and treatment purposes. Unfortunately, there just are not enough mental health professionals in prisons to do extensive diagnoses -- as with O and S cases -- and effectively spend time in individual or group therapy programs.

Goldberg's rules can afford an excellent opportunity to further our knowledge of personality traits of criminals through the use of the MMPI.

Limitations of Study

There were several major difficulties encountered with this study. Predominant among the difficulties was that the clinicians, besides bringing their own professional experience to the decision-making process, also used diagnostic instruments other than the MMPI. In another research situation, the efficiency of one of the other instruments might have proved to be a more significant predictor than the MMPI rules used here.

Another limitation of the study was the unreliability of the test performances of the subjects. All 109 subjects' future was in limbo, so to speak, because of a possible prison sentence hanging over their heads. This uncertainty as to their future -- undoubtedly causing heightened anxiety -- might have obscured otherwise relevant findings. The same might also be said of intervening courtroom appearances, extended O and S commitment periods, as well as the age and cultural background of the subjects as compared to the test norm of the MMPI. All of these factors could have adversely affected the research.

CHAPTER VI

SUMMARY

This study involved two sets of hypotheses using Goldberg's three predictor profile indices -- normal vs. deviant, sociopathic vs. psychiatric, and neurotic vs. psychotic -- and one hundred and nine (109) observation and study case offenders of the Federal Reformatory, El Reno, Oklahoma. The first set of three hypotheses testing the predictive efficiency of the Goldberg rules to distinguish behavioral characteristics of the offenders were supported. The second set of hypotheses (3) tested the level of agreement between the Goldberg rules and the clinical impressions made by prison diagnosticians. These hypotheses were examined by the group as a whole, by race of the subjects, and by type of crime committed by the offender. Agreement between the indices and the clinicians was minimal resulting in more of the hypotheses being supported. When the hypotheses were tested by level of training of the clinician, Ph.D. psychologists were found to agree with the predictor profile rules to a significant level on the normal vs. deviant dimension. This finding resulted in some optimism for the predictive efficiency and continued use of the Goldberg rules. Further research with other prison populations was stressed as well as

a possible computer application of the rules for diagnostic and treatment purposes within penal institutions. The disadvantages of mislabeling an offender were discussed as well as the limitation of the study.

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APPENDIX A

Highest School Level Completed By
Observation and Study Offenders

CODEBOOK AND CORRELATIONS
 COMPUTATIONS 270 - 299
 FILL STONE (CREATION DATE = 12/16/74)

12/16/74

VARIABLE VAR033 HIGHEST SCHOOL LEVEL COMPLETED

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1. Elem. Grades 1-8	1.	11	10.1	10.2	10.2
2. High 9-11 but non-graduates.	2.	49	45.0	45.4	55.6
3. High School graduate or GED equivalent.	3.	29	26.6	26.9	82.4
4. Some college, $\frac{1}{2}$ year to 3 years.	4.	17	15.6	15.7	98.1
5. College graduate.	5.	2	1.8	1.9	100.0
9. No Data.	9.	1	0.9	MISSING	100.0
	TOTAL	109	100.0	100.0	100.0

STATISTICS..

MEAN	2.537	STD ERROR	0.091	MEDIAN	2.378
MODE	2.000	STD DEV	0.942	VARIANCE	0.886
KURTOSIS	-0.380	SKEWNESS	0.433	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID OBSERVATIONS - 108
 MISSING OBSERVATIONS - 1

APPENDIX A1

Level of Education Completed by Race of
Observation and Study Offenders

Level of Education Completed by Race of
Observation and Study Offenders

Total:

1)	Less than 11 years schooling:	=	60
2)	High School Graduate or more:	=	48

White:

1)	Less than 11 years schooling:	=	42
2)	High School Graduate or more:	=	41

Black:

1)	Less than 11 years schooling:	=	16
2)	High School Graduate or more:	=	7

Indian:

1)	Less than 11 years schooling:	=	2
2)	High School Graduate or more:	=	0

PLEASE NOTE:

Appendices B, C, D and J have very small and indistinct print. Appendices F, G, and H are Data Forms with print to the extreme edges of pages. Some print will be lost in binding. Best available copy. Filmed as received.

UNIVERSITY MICROFILMS.

APPENDIX B

Occupation At Time of Arrest of
Observation and Study Offenders

CONFJ30K AND CORRELATIONS
COMPUTATIONS 270 - 299
FILE STONE (CREATION DATE = 12/16/74)

12/16/74

VARIABLE VARC34 OCCUPATION ATA

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
1. Professional, tech & kindred workers.	1.	3	2.8	2.8	2.8
2. Managers, officials, proprietors, farmers & farm workers.	2.	4	3.7	3.7	6.5
3. Clerical & Sales.	3.	9	8.3	8.3	14.8
4. Craftsman and foreman.	4.	21	19.3	19.4	34.3
5. Operatives & kindred workers.	5.	17	15.6	15.7	50.0
6. Unskilled, service & domestic.	6.	32	29.4	29.6	79.6
7. Student-non-earning.	7.	20	18.3	19.5	98.1
8. Unemployed.	8.	2	1.8	1.9	100.0
9. No data.	9.	1	0.9	MISSING	100.0
	TOTAL	109	100.0	100.0	100.0

STATISTICS..

MEAN	5.139	STD ERROR	0.153	MEDIAN	5.500
MODE	6.000	STD DEV	1.585	VARIANCE	2.513
KURTOSIS	-0.106	SKEWNESS	-0.611	RANGE	7.000
MINIMUM	1.000	MAXIMUM	8.000		
VALID OBSERVATIONS -	108				
MISSING OBSERVATIONS -	1				

APPENDIX B1

Classification of Occupation At Time of Arrest
By Race of Observation and Study Offenders

Classification of Occupation At Time of Arrest
By Race of Observation and Study Offenders

	<u>White</u>	<u>Black</u>	<u>Indian</u>	<u>Total</u>
<u>Occupation 1:</u>	2	1	0	3
Professional, technical and kindred workers				
<u>Occupation 2:</u>	2	2	0	4
Managers, Officials, and Proprietors and kindred Workers.				
a. Nonfarm managers, officials, and pro- priators.				
b. Farmers and farm managers.				
<u>Occupation 3:</u>	8	1	0	9
Clerical and sales workers.				
a. Clerical and kindred workers.				
b. Sales workers.				
<u>Occupation 4:</u>	15	5	0	20
Craftsman, foreman, and kindred workers.				
<u>Occupation 5:</u>	15	2	0	17
Operatives and kindred workers.				

Classification - cont'd.

	<u>White</u>	<u>Black</u>	<u>Indian</u>	<u>Total</u>
<u>Occupation 6:</u>	21	9	2	32
Unskilled, service, and domestic workers.				
a. Private household workers.				
b. Service workers, except private household.				
c. Farm laborers and foremen.				
d. Laborers, except farm and mine.				
 <u>Occupation 7:</u>	 2	 0	 0	 2
Student:				
Non-earning.				
 <u>Occupation 8:</u>	 17	 3	 0	 20
Unemployed				

APPENDIX C
Marital Status of Observation
and Study Offenders

CASEBOOK AND CORRELATIONS
 COMPUTATIONS 270 - 299
 FILE STONE (CREATION DATE = 12/16/74)

12/16/74

VARIABLE VAR032 MARITAL STATUS

VALUE LABEL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
SINGLE	1.	68	62.4	63.0	63.0
MARRIED	2.	23	21.1	21.3	84.3
DIVORCED	4.	10	9.2	9.3	93.5
SEPARATED	5.	4	3.7	3.7	97.2
COMMON LAW	6.	3	2.8	2.8	100.0
	9.	1	0.9	MISSING	100.0
	TOTAL	109	100.0	100.0	100.0

STATISTICS..

MEAN	1.778	STD ERROR	0.127	MEDIAN	0.0
MODE	1.000	STD DEV	1.321	VARIANCE	1.745
KURTOSIS	2.125	SKELNESS	1.783	RANGE	5.000
MINIMUM	1.000	MAXIMUM	6.000		

VALID OBSERVATIONS - 108
 MISSING OBSERVATIONS - 1

106

APPENDIX D

Type of Military Discharge of Observation
and Study Offenders

COUSHOCK AND CORRELATIONS
 COMPUTATIONS 270 - 299
 FILE STONE (CREATION DATE = 12/16/74)

12/16/74

VARIABLE VAR029 TYPE OF MILITARY DISCHARGE

VALUE LABFL	VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
HONORABLE	1.	22	20.2	48.9	48.9
GENERAL	2.	8	7.3	17.8	66.7
MEDICAL	3.	1	0.9	2.2	68.9
OTHER THAN HONORABLE	4.	0	4.6	11.1	80.0
NOT DISCHARGED	5.	9	8.3	20.0	100.0
	9.	64	58.7	MISSING	100.0
	TOTAL	109	100.0	100.0	100.0

STATISTICS..

MEAN	2.356	STD ERROR	0.244	MEDIAN	1.563
MODE	1.000	STD DEV	1.640	VARIANCE	2.689
KURTOSIS	-1.229	SKEWNESS	0.697	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		

VALID OBSERVATIONS - 45
 MISSING OBSERVATIONS - 64

APPENDIX E

Number of Prior Commitments of Observation
and Study Offenders

Number of Prior Commitments of Observation
and Study Offenders

Under 18 years with commitment LE¹ 1 year - Bureau of Prisons

N = 0

Under 18 years with commitment LE 1 year - Other Prisons

N = 5 with 1 commitment each

N = 1 with 2 commitments

Under 18 years with commitment GT² 1 year - Bureau of Prisons

N = 0

Under 18 years with commitment GT 1 year - Other Prisons

N = 4 with 1 commitment each

N = 1 with 2 commitments

Over 18 years with commitment LE 1 year - Bureau of Prisons

N = 1 with 1 commitment

Over 18 years with commitment LE 1 year - Other Prisons

N = 4 with 1 commitment each

N = 4 with 2 commitments each

Over 18 years with commitment GT 1 year - Bureau of Prisons

N = 1

Over 18 years with commitment GT 1 year - Other Prisons

N = 5 with 1 commitment each

N = 1 with 2 commitments each

¹LE is less than or equal to one year.

²GT is greater than one year.

APPENDIX F

Bureau of Prisons Form 6:

Social Data

**U. S. DEPARTMENT OF JUSTICE
BUREAU OF PRISONS
SOCIAL DATA**

1. Register No. (1-9)		2. Name (Last, First, Middle) (10-34)				3. Date Prepared (mo., day, year) (35-40) 03-18-71	
4. Institution Name and Location Fed Reformatory, El Reno, Okla				5. Inst. Code (41-43) 115		6. Prepared By	
7. Social Security No. (44-52)		Legal Residence	8. City (53-66)		9. State	Code (67-68)	10. Zip Code (69-71)
			Springfield		Minnesota	23	56087
(78-80)	Dup Columns 1-9	Probable Release Destination	11. City (10-23)		12. State	Code (24-25)	13. Zip Code (26-28)
060			Des Moines		Iowa	15	50300
14. Military History				1 - Yes 2 - No 3 - Unknown			(31) 2
15. Length of Military Service				Enter Actual Number of Months			(32-34) *
16. Type of Military Discharge				1 - Honorable 3 - Medical 5 - Not Discharged 2 - General 4 - Other than Honorable			(35) *
17. Selective Service Violator on Present Offense				1 - Yes 2 - No			(36) 2
18. Type of Selective Service Violator				1 - Jehovah's Witness 3 - Other Religious 5 - All Other 2 - Traditional Religious 4 - Ideological			(37) *
19. Marital Status				1 - Single 3 - Widow(er) 5 - Separated 2 - Married 4 - Divorced 6 - Common Law			(38) 1
20. Citizenship				1 - USA 2 - Canada 3 - Mexico 4 - Other			(39) 1
21. Age at First Arrest							(40-41) 18
22. Total Number of Arrests							(42-43) 03
23. Age at First Commitment of One Year or Less							(44-45) *
24. Age at First Commitment of More Than One Year							(46-47) *
25. Total Number of Commitments for which 6 Months or More Were Served { Exclude present sentence }							(48-49) *
NUMBER OF PRIOR COMMITMENTS							
Under Age 18 with Commitment for				Age 18 and Over with Commitment for			
1 Year or Less		More than 1 Year		1 Year or Less		More than 1 Year	
Bureau Prisons	Other	Bureau Prisons	Other	Bureau Prisons	Other	Bureau Prisons	Other
(50-51)	(52-53)	(54-55)	(56-57)	(58-59)	(60-61)	(62-63)	(64-65)
26. *	27. *	28. *	29. *	30. *	31. *	32. *	33. *
34. Longest Time Free Since First Commitment (Months)							(66-68) *
35. Longest Single Time Served on Any Commitment (Months)							(69-71) *
36. Co-Defendants				1 - Yes 2 - No			(72) 2
37. Name and Location of Co-Defendants							(73-80) 001
38. Religious Preference:							112

APPENDIX G

Bureau of Prisons Form 7:
Educational Data

**U.S. DEPARTMENT OF JUSTICE
BUREAU OF PRISONS
EDUCATIONAL DATA**

1. Register No. (1-9) 	2. Name (Last, First, Middle) (10-34) 	3. Institution Name & Location FR, El Reno, Oklahoma	4. Inst. Code (35-37) 115
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SAT SCORES

5. Date of test 02-17-71	(38-43)	13. Arithmetic reasoning	(61-63) *
6. Name of test 1 - Primary 1 3 - Intermediate 1 2 - Primary 2 4 - Intermediate 2 5 - Advanced	(44) 4	14. Arithmetic concepts	(64-66) 118
		15. Arithmetic application	(67-69) 119
7. Form: w, x, y or z X	(45)	16. Social Studies	(70-72) *
8. Battery median 119	(46-48)	17. Science	(73-75) *
9. Paragraph meaning 120	(49-51)		(78-80) 070 Dup Columns 1-9
10. Spelling 122	(52-54)	18. Word study	(10-12) *
11. Language 110	(55-57)	19. Word meaning	(13-15) 115
12. Arithmetic comprehension 126	(58-60)	20. Science social studies	(16-18) *

21. BETA SCORES

Test 1 (19-20) (A) 15	Test 2 (21-22) (B) 15	Test 3 (23-24) (C) 14	Test 4 (25-26) (D) 13	Test 5 (27-28) (E) 13	Test 6 (29-30) (F) 14	Beta IQ (31-33) (G) 121
22. Date of Beta test 02-21-71						

23. GATB SCORES

(40-42) G 129	(43-45) V 125	(46-48) N 130	(49-51) S 110	(52-54) P 116	(55-57) Q 126	(58-60) K 111	(61-63) F 105	(64-66) M 105
24. Date of Gattb test 02-19-71						(78-80) 071	Dup Columns 1-9	
25. Highest school grade completed (GED = 12) 12			26. Age at completion 17					

27. Number of college hours successfully completed	Semester Hours (14-16) 000 (A)	Quarter Hours (17-19) 000 (B)
28. Job at time of arrest: Laborer	Dot Code (20-22) (A) 589	No. Months on Job (23-25) (B) 003
29. Longest prior work experience (Job title) Laborer	Dot Code (26-28) (A) 589	No. Months on Job (29-31) (B) 004
30. Remarks. Gain ontry level skill; 26 weeks.		(72-80) 072

APPENDIX H

Bureau of Prisons Form 8:
Medical and Related Data

BUREAU OF PRISONS MEDICAL & RELATED DATA

1. Register No. (11-9)	2. Name (Last, First, Middle) (10-34)	3. Date Prepared (Mo, Da, Yr) (35-40) 03-12-71
4. Institution Name & Location (FR 71 Reno, Oklahoma	5. Inst. Code (41-43) 115	6. Prepared by

MEDICAL DATA

CURRENT DIAGNOSIS	ICDA CODE	TREATMENT PRIORITY	RECOMMENDED PLACE OF TREATMENT
	(44-48) (A) *	(49) (B) *	(50) (C) *
7.	(51-55) (A)	(56) (B)	(57) (C)
8.	(58-62) (A)	(63) (B)	(64) (C)
9.	(65-69) (A)	(70) (B)	(71) (C)
10.	(78-80) 080	Dup Columns 1-9	
11.	(10-14) (A)	(15) (B)	(16) (C)
12.	(17-21) (A)	(22) (B)	(23) (C)

DENTAL DATA

13. Decayed teeth (24-25) 03	14. Missing teeth (26-27) 02	15. Filled teeth (28-29) 05	16. Total teeth (30-31) 10
--	--	---------------------------------------	--------------------------------------

CURRENT DIAGNOSIS	ICDA CODE	TREATMENT PRIORITY	RECOMMENDED PLACE OF TREATMENT
	(32-35) (A)	(37) (B)	(38) (C)
17. Dental Caries	521.0	3	1
18. Peridontal Disease	523.0	2	1
19. Acquired Absence of Teeth	525.0	4	1

PSYCHIATRIC & PSYCHOLOGICAL DATA

CURRENT DIAGNOSIS	ICDA CODE	TREATMENT PRIORITY	RECOMMENDED PLACE OF TREATMENT
	(53-57) (A)	(58) (B)	(59) (C)
20. Passive-aggressive personality disorder	301.8	2	1
21.	(60-64) (A)	(65) (B)	(66) (C)
22.	(67-71) (A)	(72) (B)	(73) (C)
	(78-80) 081	Dup Columns 1-9	

TREATMENT PRIORITIES: 1 - Immediate 2 - Short term deferred (less than one year) 3 - Long term deferred 4 - None

RECOMMENDED PLACE OF TREATMENT: 1 - At current institution 2 - Within local community 3 - Springfield 4 - Other BOP institution 5 - Other federal institution

23. MMPI PART NUMBER SCORES

(10-11) 42	(12-13) 62	(14-15) 45	(16-17) 58	(18-19) 45	(20-21) 55	(22-23) 69	(24-25) 58	(26-27) 56	(28-29) 50	(30-31) 48	(32-33) 63
24. Drug dependence											
1 - Non-user 3 - Recent user 5 - User (not withdrawn) 2 - Former user 4 - User (immediate past)											
25. Type of drug											
1 - Marijuana 3 - Hallucinogens 5 - Psycho-stimulants 2 - Narcotics 4 - Barbiturates 6 - Other											
26.											
1 - Non-significant use 3 - Binge use 5 - Other 2 - Former excessive use 4 - Habitual excessive use											

APPENDIX I

Goldberg's Three MMPI Predictor Profile Index Means
for all 109 Observation and Study Case Subjects

CREATE DATA FILE

10/11/74

11X,F5:0.1X,F5:0.1X,F3:0.1X,F3:0.1X,F3:0.1X,F3:0.1X,F3:0.1
VAR001,F04H0NE,0E0H0NE,0E0H0NE,0E0H0NE,0E0H0NE,0E0H0NE,0E0H0NE

	F1	F2	F3
1	193	1	49
2	149	1	59
3	171	1	76
4	177	1	53
5	117	0	66
6	124	1	42
7	179	1	92
8	141	1	32
9	133	1	41
10	175	1	45
11	128	1	73
12	142	1	63
13	113	0	59
14	179	0	71
15	140	1	36
16	132	1	45
17	122	0	47
18	173	0	46
19	03	0	27
20	135	1	34
21	149	1	80
22	120	0	64
23	174	1	37
24	94	0	20
25	141	1	53
26	177	1	52
27	144	1	87
28	155	1	36
29	139	1	52
30	134	1	59
31	121	0	67
32	115	0	20
33	145	1	69
34	145	1	37
35	156	1	22
36	123	0	43
37	131	1	37
38	174	1	65
39	89	0	49
40	120	0	58
41	124	0	92
42	131	1	62
43	120	1	53
44	125	1	79
45	174	1	39
46	96	0	60
47	112	0	32
48	155	1	66
49	154	1	60
50	101	0	63
51	125	1	69
52	132	1	41
53	181	1	59
54	159	1	83
55	135	1	71
56	112	0	39
57	103	0	55
58	104	1	47
59	125	1	47

60	111	0	2	0	1	37	1
61	101	1	13	1	1	19	0
62	102	1	23	1	1	68	1
63	103	1	10	1	1	49	1
64	104	1	14	1	1	55	1
65	105	1	14	1	1	46	1
66	106	1	14	1	1	53	1
67	107	1	14	1	1	72	1
68	108	1	14	1	1	72	1
69	109	1	14	1	1	62	1
70	110	1	14	1	1	29	0
71	111	1	14	1	1	35	0
72	112	1	14	1	1	53	1
73	113	1	14	1	1	76	1
74	114	1	14	1	1	41	0
75	115	1	14	1	1	42	0
76	116	1	14	1	1	37	0
77	117	1	14	1	1	71	1
78	118	1	14	1	1	29	0
79	119	1	14	1	1	92	1
80	120	1	14	1	1	46	1
81	121	1	14	1	1	89	1
82	122	1	14	1	1	47	1
83	123	1	14	1	1	70	1
84	124	1	14	1	1	55	1
85	125	1	14	1	1	84	1
86	126	1	14	1	1	39	0
87	127	1	14	1	1	60	1
88	128	1	14	1	1	42	0
89	129	1	14	1	1	92	1
90	130	1	14	1	1	117	1
91	131	1	14	1	1	55	1
92	132	1	14	1	1	57	1
93	133	1	14	1	1	77	1
94	134	1	14	1	1	43	0
95	135	1	14	1	1	47	1
96	136	1	14	1	1	73	1
97	137	1	14	1	1	33	0
98	138	1	14	1	1	48	1
99	139	1	14	1	1	34	0
100	140	1	14	1	1	61	1
101	141	1	14	1	1	51	1
102	142	1	14	1	1	70	1
103	143	1	14	1	1	42	0
104	144	1	14	1	1	74	1
105	145	1	14	1	1	43	0
106	146	1	14	1	1	25	0
107	147	1	14	1	1	42	0
108	148	1	14	1	1	100	1
109	149	1	14	1	1	62	1
110	150	1	14	1	1	99	1

APPENDIX J

Raw Data

MMPI Profile Mean Score

15127 OCT 08, '74 ID=03C8 ** VANDERBILT UNIVERSITY COMPUTER CENTER -- UTS SYSTEM **

15127 OCT 08, 1974 ID=03CB
JDB 701629ZE, (LIST)

! PCL

COPY CR TO LP

0012AX11	30	86	68	90	94	84	79	74	70	85	88	65	71	12	23	50	08	24	1	60	9	1	22	1	2	9	
0023AX12	50	66	61	67	84	60	71	47	62	03	80	60	71	07	30	46	06	03	1	31	0	2	99	9	2	9	
0031AX11	53	76	48	54	70	58	86	69	75	75	80	53	72	09	22	52	09	13	1	43	0	2	99	9	2	9	
0041AZ51	56	53	72	57	56	65	90	59	59	60	63	60	71	04	08	48	02	18	1	46	1	1	27	1	2	9	
0051AX11	56	53	65	52	44	60	49	67	65	50	55	73	71	10	08	51	06	06	1	24	1	2	99	9	2	9	
0061AX11	50	60	46	54	70	49	64	63	65	75	51	58	72	07	21	50	05	12	1	31	9	1	28	4	2	9	
0071AX21	50	110	49	70	72	76	81	76	88	89	119	73	71	10	01	53	02	12	9	03	0	1	03	1	2	9	
0082AY41	56	46	57	59	68	62	71	63	44	54	48	60	71	10	21	50	04	24	1	25	1	1	21	1	2	9	
0091AX11	42	62	45	53	45	55	09	58	56	50	48	63	71	02	05	50	12	04	1	23	0	2	99	9	2	9	
0101AZ11	56	78	44	92	77	80	74	76	76	71	74	65	72	07	13	47	08	07	1	25	9	1	24	1	2	9	
0111AY31	50	73	40	65	60	60	74	69	79	73	77	85	71	02	12	40	10	19	9	99	9	99	9	9	8		
0121AY31	56	48	64	49	46	49	74	73	53	54	57	55	72	07	13	47	08	19	1	36	1	2	99	9	2	9	
0131AX11	56	43	48	59	60	62	57	73	76	62	61	60	72	06	15	53	04	18	1	12	0	1	18	5	2	9	
0141AY11	50	43	70	52	46	62	55	67	70	64	67	50	71	05	14	44	01	14	1	06	1	1	19	1	2	9	
0151AX21	43	77	31	67	55	69	54	61	61	50	53	55	72	01	19	45	06	28	1	13	1	1	06	2	2	9	
0162AZ51	56	53	62	70	53	71	84	63	56	56	50	60	72	03	03	50	09	02	1	04	1	2	99	9	1	1	
0171AZ11	53	49	64	52	53	67	69	63	59	58	50	69	71	08	26	47	07	25	1	43	0	1	22	1	2	9	
0182AX11	52	88	51	44	66	55	71	73	59	58	78	83	72	02	09	50	10	03	1	60	9	1	22	1	2	9	
0191AY11	56	40	60	52	63	62	43	73	62	66	47	43	71	06	30	48	02	01	1	14	0	2	99	9	2	9	
0201AY41	53	53	62	52	47	67	77	69	53	62	59	70	71	06	30	44	09	29	1	14	0	2	99	9	2	9	
0213AZ11	53	73	47	65	77	45	71	42	59	52	55	50	72	02	14	48	03	07	1	31	0	2	99	9	2	9	
022AX31	73	49	70	52	48	64	64	67	67	56	54	53	60	72	04	26	50	03	31	1	13	0	2	99	9	2	9
0231AX31	53	55	46	47	70	47	71	45	47	56	50	65	71	06	08	47	07	15	1	36	0	2	99	9	2	9	
0241AX11	53	50	48	47	46	49	50	53	38	44	40	53	71	09	15	51	08	14	1	43	0	2	99	9	2	9	
0252AX11	50	60	49	77	58	64	71	61	56	52	63	73	72	04	21	50	11	28	1	17	1	1	22	5	2	9	
0261AY31	50	63	62	47	46	56	74	53	53	56	61	68	72	02	18	43	06	24	1	18	1	1	16	1	2	9	
0271AX31	76	60	62	72	53	71	71	80	59	40	71	70	71	03	19	50	04	05	1	18	1	2	99	9	2	9	
0281FX11	50	50	72	54	60	65	83	61	53	62	61	65	72	06	19	46	08	20	1	32	0	2	99	9	2	9	
0291AZ51	50	55	68	59	45	71	71	77	56	52	59	62	72	01	14	49	12	27	1	43	0	2	99	9	2	9	
0302AX11	53	60	48	55	70	65	97	57	62	42	51	55	72	06	16	49	05	28	1	13	0	2	99	9	2	9	
0311AY41	56	62	55	54	48	55	74	51	59	48	55	81	72	03	02	54	02	05	1	32	0	1	07	2	2	9	
0321AX11	50	48	59	47	53	62	64	51	41	62	53	60	71	06	16	48	10	29	1	18	9	2	99	9	2	9	
0331AZ71	70	50	62	52	53	71	86	61	65	54	59	75	72	01	13	43	02	23	1	43	0	2	99	9	2	9	
0341AY41	44	82	55	70	53	64	79	69	62	97	92	83	72	03	03	48	02	27	1	05	1	1	48	1	2	9	
0351AY41	50	70	49	70	58	65	74	39	38	60	59	60	72	02	07	51	12	26	1	15	0	1	02	2	2	9	
0361AX11	50	48	57	44	59	58	97	47	53	46	44	50	71	02	08	49	01	27	1	25	0	2	99	9	2	9	
0371AX31	50	53	53	52	58	47	71	49	47	60	57	63	71	02	26	47	10	28	1	06	0	2	99	9	2	9	
0381AZ51	53	55	59	54	58	65	74	73	70	66	73	68	72	03	30	47	02	01	1	42	0	1	35	1	2	9	
0391AX11	43	50	55	44	48	51	90	49	50	48	55	73	71	02	05	48	09	20	1	27	0	2	99	9	2	9	
0401AX11	53	53	51	44	68	47	52	66	52	58	60	48	72	01	20	49	07	25	1	30	1	2	99	9	2	9	
0412AX31	53	78	49	49	57	53	84	61	70	45	67	73	71	02	05	49	03	21	1	25	0	2	99	9	2	9	
0421AX11	44	60	62	52	53	49	71	51	50	52	69	63	72	08	24	50	03	23	1	31	1	2	99	9	2	9	
0431AZ51	52	52	61	51	46	69	71	61	70	62	61	65	73	04	25	52	02	25	1	43	1	2	99	9	2	9	
0441AX31	43	53	57	62	70	49	62	51	62	54	57	50	70	11	20	49	09	01	1	18	0	2	99	9	2	9	
0451AX31	53	48	73	62	60	60	81	57	48	69	57	50	71	01	08	51	02	13	1	43	0	1	14	2	2	9	
0462AX31	51	46	55	41	54	51	80	75	56	57	51	65	71	05	07	45	02	21	1	06	1	1	48	2	2	9	
0472AX31	53	55	62	52	48	64	64	53	53	71	61	68	72	04	12	47	05	02	1	25	1	1	36	1	2	9	
0482AY	50	73	63	72	72	66	79	51	65	81	88	72	72	02	04	55	02	11	1	25	0	2	99	9	2	9	
0491AX21	53	58	51	44	60	55	79	53	62	45	45	58	71	07	14	47	11	12	1	13	0	1	13	4	2	9	
0502AZ51	50	44	61	53	46	53	54	72	55	46	47	62	72	01	31	48	02	20	1	38	1	1	62	5	2	9	
0511AZ71	56	45	67	49	57	57	69	62	55	58	53	62	72	06	14	52	04	25	1	31	0	2	99	9	2	9	
0521AX11	46	48	53	52	70	55	69	59	53	54	51	58	71	10	31	47	05	27	1	16	0	1	27	2	2	9	
0531AY51	50	55	61	65	48	65	79	88	73	60	61	75	71	09	08	52	08	14	1	18	0	2	99	9	2	9	
0541AY41	46	64	57	44	48	49	95	78	73	56	69	75	71	06	22	50	12	23	1	36	0	2	99	9	2	9	
0551AX31	53	77	49	74	53	54	72	72	53	48	67	82	71	01	08	50	11	01	1	24	1	1	18	1	2	9	
0561AZ71	46	49	46	41	58	47	57	59	56	56	40	43	72	04	10	48	09	25	1	36	1	1	19	1	2	9	
0571AZ71	50	80	51	47	75	64	86	65	61	65	63	81	72	12	16	51	07	15	1	48	0	1	23	5	2	9	
0581AY41	50	68	62	90	84	73	71	56	62	77	80	68	71	06	30	48	09	03	1	14	9	1	03	1	2	9	

