Predicting aftercare performance

Noel Edward Nelson

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PREDICTING AFTERCARE PERFORMANCE

by

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Chairman, Board of Examiners

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INTRODUCTION

The United States is charged with being the most lawless nation in the world: more than two million major crimes are committed annually in this country, and it has been estimated that crime is costing us billions of dollars every year.

Unfortunately, the statistics thus far gathered by the United Nations Department of Economic and Social Affairs suffer from lack of uniformity, absence of definition, and are of questionable reliability. Upon cursory examination of available data, this allegation, although subject to argument, appears to be valid. Hence, the allegation is debatable.

Statistics compiled by the U.S. Children's Bureau and the F.B.I.'s Uniform Crime Reports do support the authenticity of crime and delinquency as being one of the most crucial social problems encountered in the United States today. These statistics not only reflect the existence of the problem but also attest to the fact that efforts thus far made to combat this problem have, at best, been negligible.

Along with recognition of the problem, much attention has been focused on causation. It can be argued that elements of crime causation are inherent in the very nature of the revolutionary beginnings of our country. Lawlessness was condoned in the establishment of these United States. Westward direction of the frontier, personal achievement, materialism, acquisition of property, slavery, and illegitimate ownership
are all representative of the original American Ethic: the establishment of new social institutions to replace the former legitimate institutions.

Early inquiries into the causes of crime explored many avenues. Scholars studying Darwin's writings on evolution speculated on the possible statistc tendencies of man and reasoned that criminals and others who endanger the public welfare might be throwbacks to an earlier evolutionary stage of the human race. Cesare Lombroso inaugurated the Positive School of Criminology and in his book, *Criminal Man* stated that there is a distinct born criminal type, predisposed to crime and identifiable by certain stigmata or anomalies.  

Following Lombroso, numerous and varied nomalistic theories of crime causation and classification of criminals emerged. Today, these theories have little more than academic value, but were important in that they emphasized the study of the individual criminal and thus helped to point the way to modern scientific research. Nomalistic theories were severely criticized by Healy who affirmed the principle of Multiple Causation in individual cases in contrast to a single-factor explanation of all crime and criminals.

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Although Multiple Causation is generally accepted, modern causation research appears to have reached an impasse with the development of two of the major opposing theories: Freud's Psychoanalytic Theory and Sutherland's Differential-Association Theory. While proponents of one or the other of these theories criticize each other, Reckless states that because of the complexity of the problem of crime causation, we may have to abandon the search for causes and be content with a study of the factors which, "while not explaining why individuals become criminal, will indicate the risk or liability for becoming criminal."

Reckless' statement shall be the point of departure for this study. The focus will be directed to treatment of the offender. There are two major jurisdictional divisions in the correctional process: treatment of the adult offender and treatment of the juvenile offender. This jurisdictional division is subject to definition in each of the 50 states. Attempts have been made to unify and codify the rehabilitative treatment philosophy and process of juvenile offenders by the 1940 draft of the Model Youth Correction Act by the American Law Institute. Today, only a few states have adopted this model.

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in one form or another; notably, California, Minnesota, Wisconsin, Massachusetts, and Texas.

Generally speaking, offenders (those who violate laws or statutes) who are between the ages of eight and 18 are subject to the juvenile court law in the state in which they reside and are considered to be juvenile offenders. The machinery for implementing the treatment process for both juveniles and adults operates within three major frameworks: probation, incarceration, and parole.

Practitioners in the specific and related areas of juvenile delinquency have been aided by research and subsequent literature which has accumulated for a century. In spite of this, the recorded rates of delinquency are rising. Although these rapidly accelerating rates can be explained in terms of many factors, this observation may reflect the inefficiency of the machinery which we have invented and employed in attempting to combat crime and delinquency. Pessimism is thus reflected in statements such as that made by Sophia Robison:

Dismal as it may sound, in our attack on the problem of delinquency, those of us who work in the social sciences or social services are in the unenviable position which medicine would face if there was (1) no agreement on the definition of the disease for which the cure was sought, (2) no definitive description of the characteristics of those who were vulnerable, (3) no precise methods to be used, and (4) no agreed upon criteria for determining the relative success of the cure.

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7 The specific jurisdictional limits of juvenile offenders in the State of Montana will be delineated in the text of the study.

8 Sophia M. Robison, "Why Juvenile Delinquency Preventive Programs are Ineffective," *Federal Probation*, December, 1961, XXV, p. 34.

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The above statement alludes to the need for continuing research. Ever increasing research budgets of social service agencies signify recognition of this need. The specific area of interest and concern of this thesis lies in the recidivism rate reflected in admission versus release in our juvenile correctional facilities. Although available recidivism statistics are inconclusive and difficult to interpret, they indicate our failure to reform or rehabilitate during the period of incarceration. The literature reports this particular rate of recidivism to vary from ten percent to 80 percent depending upon the offense, type of institution, the offender, reporting methods, etc.

This study will examine parole failures and parole successes originating at the Pine Hills School, with primary consideration given to the use of prognostic tools in evaluating the interrelationships of success or failure on parole.

9 State Industrial School, Miles City, Montana.
CHAPTER ONE

DEVELOPMENT OF JUVENILE PAROLE IN MONTANA

The first parole legislation, according to Randolph E. Wise, Parole Consultant for the National Probation and Parole Association, was enacted in Massachusetts in 1837. In Montana, the Thirty-Fourth Legislative Assembly enacted into law Senate Bills 169, 170, 171, and 172, thus placing on the law books a modern code dealing with probation, parole, pardon, and executive clemency. The first three-man Board of Pardons, a Director of Probation and Parole, three District Supervisors of Probation and Parole, and an office secretary, assumed their duties on April 1, 1955. Adult parole laws are in effect today in every state in the United States, the District of Columbia, and in all the territories.

Probation is a treatment program in which final action in an adjudicated offender's case is suspended so that he remains at liberty, subject to conditions imposed by or for a court, under the supervision and guidance of a probation officer. It is a treatment program designed to facilitate the social

2 Ibid., p. 18.
3 Ibid., p. 7.
readjustment of offenders. Historians contend that John Augustus is the originator of juvenile probation. In Boston, in 1841, he became interested in court work. He acquired the confidence of the court, and throughout the remainder of his life, many youthful offenders (as well as adult offenders) were released to his custody as an alternative to institutionalization.

The first separate institutions for wayward youth in the United States began appearing in the 1820's. Although the first modification of court procedure in the United States occurred in 1870 when separate hearings were required for the trial of juvenile offenders in Boston, the first juvenile court was not established until 1899 in Cook County, Illinois. It was created by a senate bill and styled as "an act to regulate the treatment and control of dependent, neglected, and delinquent children."

Parole is a treatment program in which an offender, after serving part of a term in a correctional institution, is conditionally released under supervision and treatment by a parole worker. The origin of juvenile parole is associated with

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5 Ibid., pp. 11-14.


8 Ibid., p. 229.
the opening of the Elmira Reformatory in New York in 1876. It was designed as an institution for young adults, aged 16 to 30, with provisions for Aftercare upon their release.

Provisions for juvenile probation, juvenile incarceration, and juvenile parole are incorporated in the juvenile court laws. Today juvenile court laws are on the statute books in all states and territories.

In 1893, the Montana Legislature provided for reform schools for boys and girls ages eight through 14. This was the first law relating specifically to juvenile offenders. The Colorado Juvenile Court Law has served as a model for the development of the Montana Juvenile Court Law. The Juvenile Court Law in Montana had its origin in the 1895 Legislature which provided that legal matters regarding juveniles would be heard in private hearings and were to be a function of the District Court. That legislature also provided for: the petitioning to the Governor for the transfer of all juvenile offenders under the age of 18 from the State Prison to the Industrial School; the remanding of incorrigible inmates at the Industrial School back to the original court of commitment for possible confinement in that county jail; and the provision for release on parole from the reform schools for those juveniles

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9 Dressler, op. cit., p. 55.

10 Robison, op. cit., p. 230.
who had completed one year of confinement at the school. This latter provision is most noteworthy for purposes of this study.

Implementation of the parole process did not occur until 70 years later; however, the reform schools were built and the State Industrial School, known as the Pine Hills School at Miles City, Montana, was established with the signing of House Bill 184 in 1893.

Today Montana Law stipulates that: "The State Industrial School shall be for the keeping and reformatory training of all male youths between the ages of ten (10) and twenty-one (21) years who are residents of the State of Montana and who have been regularly committed to said school by a duly authorized Court."

The practice of parole developed slowly. The above-mentioned provision prevailed until 1947 when it was stipulated that: "Juvenile offenders released on parole from the State Industrial School are required to report regularly to the Superintendent their conduct and submit certificates of good behavior."

The Thirty-Ninth Legislative Assembly in 1965 provided that the Board of Pardons shall: "Propose programs to the


12 Section 80-806, Revised Codes of Montana, 1947, as amended.

80-820, Revised Codes of Montana, 1947;
legislative assembly to meet the projected long-range needs of institutions, including programs and facilities for the diagnosis, treatment, care and Aftercare of persons placed in institutions." In 1967 this proposal was amended and provided for the establishment of juvenile correctional facilities.

The State Department of Institutions within the annual or biannual budgetary appropriation therefore may establish, maintain, and operate facilities as may be needed properly to diagnose, care for, train, educate, and rehabilitate children in need of these services ten (10) years of age or older, and under twenty-one (21) including but not limited to the Mountain View School, the Pine Hills School, and the Youth Forest Camp.

The above legislative provisions provided the foundation upon which the Juvenile Aftercare Division of the Department of Institutions has been built. In July, 1965, the Director was appointed. In October of the same year, an Aftercare Counselor was hired for the Great Falls area. In July, 1967, the Legislature authorized four additional counselors for the Havre, Billings, Butte, and Missoula areas. Aftercare Counselors presently supervise those juveniles released from the State Industrial School, the State Vocational School, and the Montana Children's Center. Section 80-1410 implies, however, that Aftercare services are authorized to extend to other state institutions as well. Pending budgetary requests have taken

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14 Section 80-1405, Revised Codes of Montana, 1947, as amended.

15 Section 80-1410, Revised Codes of Montana, 1947, as amended.
The correctional treatment process for juveniles in Montana has some similarity to the Youth Correction Authority Plan. The judicial function of the Court is divorced from the administrative function of the Department of Institutions, thus relieving political and jurisdictional conflict. The process is so structured that the indeterminate sentence concept is operational. When a juvenile is committed to the State Industrial School, a commitment order is forwarded to the School from the District Court sitting as a Juvenile Court. The order declares that the minor is "hereby committed to the care and custody and control of the Pine Hills School, Miles City, Montana, until he reaches the age of 21 years or sooner released by the authorization of said institution." A point of note is the application of the term "aftercare" rather than "parole." Montana is part of the minority of states that has adopted this term. The word "parole," which in French means "word," when used in the correctional process implies a promise to obey laws. The word "aftercare," meaning "the care and treatment of a convalescent patient," more clearly describes the basic intent of the correctional treatment process.

Prior to 1965, juveniles released from the State Industrial School did not receive Aftercare services. Although they were released, very seldom was any attempt made to maintain contact with them in the community. It is difficult if not impossible to evaluate the treatment process and the effectiveness of the
School program prior to 1965 because of the absence of statistics, incompleteness of case records, and lack of follow-up. The rate of recidivism in terms of commitments and recommitments prior to 1965 is estimated by the Department of Institutions to have been approximately 50 to 60 percent.

Today, Aftercare services are rendered for every individual released from the State Industrial School. The Aftercare Counselor is, in part, responsible for developing a treatment plan in the geographic area to which the individual is released. This includes preparation for the placement of the juvenile, whether it be in his own home, a foster home, a relative's home, etc. When the minor returns to the community, supervision by the Aftercare Counselor continues on a "need" basis. Thus, the Counselor is able to schedule his time so as to insure that those clients who require frequent contact and present special problems receive a greater amount of attention. Active case-loads for fiscal year 1968 averaged 57 per Aftercare Counselor. This ratio does not appreciably exceed the National Council on Crime and Delinquency prescribed standard of 1:50 and, in fact, is far below some ratios in some other states. In spite of relatively low caseloads, the effectiveness of the Aftercare program is hampered by certain factors. The most apparent factor is that of the geographic distribution of clients and counselors. With six counselors in the entire state, much time is expended in travel, which decreases the frequency of personal contact. In addition to management of the active
caseload, the counselor is responsible for Aftercare planning prior to release from the institution which is time-consuming. Collateral responsibilities such as contact with employers, school personnel, and liaison with community agencies absorbs much of the counselor's time.

With implementation of the Aftercare treatment process, the Department of Institutions is compiling statistics to evaluate the effectiveness of the Aftercare program. During the fiscal year 1968, 639 youths received Aftercare services. That year there were 100 readmissions to the school. These readmissions to the school resulted from recommitments from the Courts and technical violation readmissions. The latter were based on administrative decisions to return juveniles to the institution after determination of an unsatisfactory response to the rules and regulations of Aftercare. This readmission rate yields a recidivism rate of 15.6 percent. Taken at face value, this is a relatively low rate. The annual reports of parole departments throughout the United States indicate that an average of about 20 to 30 percent fail on parole. This is an approximation based on crude reporting and appears to be rather conservative. The Gluecks, in an analysis of the careers of 474 male offenders paroled from the Massachusetts reformatory found that 55.3 percent were officially known to have violated their paroles.

Statistics cited out of context afford little insight into conditions prevailing at the time of the observation. In this particular case it must be understood that if certain factors were altered, the resultant recidivism rate would be altered. First, it is difficult to measure the objectivity or criteria for determining whether or not a technical violation has occurred. Second, the implications of this particular rate are meaningless, unless this rate can be compared with rates for other fiscal years. Third, this rate does not reflect frequency of law violation per case but only readmission to the institution. Fourth, a control group is not provided. Because the observations are subject to a one-year time span, only segments of a population are measured. In spite of these criticisms, one conclusion may be reached: resocialization is not occurring for a portion of those for whom Aftercare services and the institutional program are designed to serve. A second period of incarceration reflects sustained or repeated unlawful behavior. With these failures in mind, this study will represent an effort to employ a prediction device to provide a basis for evaluating and making better use of existing resources, the institution program, and the function of Aftercare in order that Aftercare success or failure may be anticipated.

The State Industrial School receives little more than the body at the time of each arrival. There is a conspicuous lack of documented social history or any other data aside from the Commitment Order accompanying each juvenile when he arrives at
the School. With this handicap, the limited staff with their limited facilities (without a diagnostic classification unit) can make only a cursory evaluation of the individual in assigning him to a program within the institution. Whether or not the program meets his needs, his progress is reviewed after six months in an effort to establish a tentative release date. The individual's overt behavior and his acceptance of the institution are the primary criteria on which this release date is based. After the individual is released from the institution, the Aftercare Counselor is afforded only minimal background information on which to base his Aftercare planning. It is logical to assume that lack of knowledge and understanding of the client often prevents the counselor from understanding the reasons for the client's negative adjustment in the community and ultimate return to the institution.

The specific area for exploration in this study will be an analysis of personal and social characteristics of juveniles released from the State Industrial School, and an attempt will be made to differentiate on the basis of these characteristics between successes and failures in the Aftercare program. The main hypothesis is:

Statistically significant differences in personal and social characteristics identify those juveniles who fail on Aftercare, and those juveniles who succeed on Aftercare in the
state of Montana after they are released from Pine Hills School.

A prognostic tool has been designed to test the hypothesis which is similar in construction to several previous Social Prediction tables. The justification for this type of analysis follows in the next chapter.

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17 See Appendix I for listing of characteristics to be analyzed.
CHAPTER TWO

PREVIOUS RESEARCH

One of the most important research undertakings in criminology is in the burgeoning field of Prediction. At the present time, there are at least 400 articles and books on this topic, the bulk of which have been written since 1950. Prediction, more than theoretical speculations or etiological research, is likely to become the most valuable tool in the design and evaluation of action programs.

Hornell Hart was among the first, if not the first, to recognize the possibility of constructing an Experience Table with a view to predicting parole adjustment. In a 1923 paper he advocated that parole candidates be scored on the basis of items thought to be prognostic of parole success and the risk of violation be established for each score. In 1928, this idea was applied by Burgess who, in what would now be called a pilot study, analysed the records of 3,000 parolees drawn equally from three Illinois prisons. These cases were first cross-classified according to outcome on parole and 21 items

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of possible significance, such as type of offense, number of associates, nationality, etc. Then, by giving one point to each subclassification that had a violation rate lower than the overall rate, a parole score was computed for each person. The violation rates were determined for selected score intervals. Parole outcome was related to the selected score intervals for seven of the items.

The next major effort at developing a social prediction table was accomplished by Sheldon and Eleanor Glueck. Their work ran concurrently with that of Burgess, and the prognostic tool itself was called an Experience Table. The tables constructed by Burgess and the Gluecks were quite similar in nature, but the items were weighted differently because the Gluecks attempted to differentiate between outcome groups rather than individuals.

George Vold, studying parolees in Illinois, using the previous studies of Burgess and the Gluecks as models, followed with the establishment of similar Prediction Tables.

This initial group of studies, although modest in claim and scope, was followed by a run of somewhat critical studies. Many criminologists expressed skepticism as to whether an

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4 Sheldon and Eleanor Glueck, op. cit., p. 321.

5 Ibid., p. 311.
experience table would persist relatively unchanged in the short run future. To throw light on this question, Barkev Sanders studied two variables: parole outcome and various items including those used by Vold. They were correlated in a sample of 5,683 federal prisoners released in the period July 1, 1933, through June 30, 1934. These cases were then scored on the best items and violation rates computed by score intervals to form an Experience Table. A follow-up sample of parolees released in the period of July 1, 1934, through December 31, 1934, was scored in the same manner. Although the first set of violation rates showed a regular progression, the pattern of rates in the followup table was erratic and quite possibly a result of chance factors. This finding, as significant now as at the time of its discovery, highlighted the possibility that items which rank persons reliably as to parole success in one period may be unreliable for that purpose in the almost immediate future.

These pioneer studies were also criticized on the grounds that they made use of whatever information happened to be on hand and that much of it was irrelevant.

Space does not permit a complete review of subsequent prediction studies; however, Illinois deserves mention. This state, the leader in the use of prognostic tools to predict


parole success and failure acknowledges early criticism. Extensive work done by Lloyd E. Ohlin contributed to the development of the system used in Illinois at the present time. Actuarial Sociologists are employed at all three men's reformatories. The Prediction Table, applied to all inmates eligible for parole, consists of 12 items on which he is rated. Recognizing the phenomena of social change, the Table is reapplied periodically to allow for changes in the inmate's social situation. The Table itself is reviewed annually and changes are considered and applied as necessary. Since implementation of the Table in Illinois, a statistically significant decrease in the violation rate has been reported.

Success in Illinois suggests the possibility of adopting that Experience Table in other jurisdictions. It does not appear, however, that such a Table can be constructed at the present time. The Attorney General's Survey of Release Procedures revealed much variation among the different states in the composition of the prison populations, the extent of preparation of the offenders for release, the amount of information on each parolee, the policies of parole selection and supervision, the length of the parole periods, the methods

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9 Ibid., p. 63.

of calculating violation rates, and the conditions faced by the offender in the community. The result has been a trend for other jurisdictions to look to Illinois as a model, but to establish independent predictive devices as local conditions dictate.

Thus far the discussion has centered on prediction research that has been done with specific reference to adult offenders. This is not to say that adaptation of predictive devices for juvenile offenders has not been attempted. In the following discussion attention will be directed to the Glueck's Social Prediction Table, The Borstal Prediction Study, and Base Expectancy Classification.

Although controversial, the most widely acclaimed predictive device in use is the Social Prediction Table developed by the Gluecks and first published in their book, *Unraveling Juvenile Delinquency*. The authors contended that it would be possible to apply the Social Prediction Table to first grade students to determine which children would be persistent.


13 Marvin A. Bohnstedt, Determination of Base Expectancies for the 1957 Male Parole Release Population (a Basic Document), State of California, Department of the Youth Authority, Division of Research, Research Report No. 12, September, 1959.
delinquents. The Table consisted of five factors: supervision of boy by mother, discipline of boy by father, affection of mother for boy, affection of father for boy, and cohesiveness of family. The Gluecks selected a sample of 1,000 boys in which the delinquency rate was exactly 50 percent. Each of the five factors was broken down into subclasses which indicated degrees of that particular factor. Then, the sample was analysed and scores were applied to each of the subclasses. For instance, under "Supervision by Mother," it was determined that of all the 1,000 boys who received unsuitable supervision, 83.2 were delinquents. This is repeated for the subclasses of all five factors. The score is then summed; the higher the sum, the greater the possibility of persistent future delinquency.

The methodology applied by the Gluecks has been criticized. It has been said that the instrument itself has not been validated from the standpoint of empirical research. It is also felt that if a sample containing other than a 50 percent delinquency rate were used, the score constants would be skewed.

It has been questioned whether or not the Gluecks selected the most highly differentiating factors for the Table. It has been acknowledged that the Table is a valid selection device, but not a predictive device.

On the other hand, the contributions of the Table have been validated. The first study, made by Bertram J. Black and Selma J. Glick of the Jewish Board of Guardians in 1952, 14

was an application of the Social Prediction Table to a group of 100 Jewish boys confined in the Hawthorne-Cedar Knolls School in New York State. The intent was to determine the extent to which it would have been possible years earlier to identify them accurately as potentially serious delinquents. It was ascertained that 91 percent of the group would have been thus identified. It is of special significance that although the Table was designed on the basis of underprivileged Boston boys, largely of English, Irish, and Italian descent and of Protestant and Catholic religions, it was found to operate as satisfactorily on a sample of New York Jewish boys.

Richard E. Thompson found the Table valid for distinguishing from among children already showing behavioral difficulties those who are true delinquents and those whose maladapted behavior is probably temporary. The sample was composed of 100 boys originally included in a famous research in Massachusetts known as the Cambridge-Sommerville Youth Study. A study done by the New Jersey Department of Institutions and Agencies in 1955 involved a random selection of 51 delinquents. The results correlated significantly with those of the Gluecks. The Social Prediction Table has also been


used by agencies in Japan and France, with similar favorable results.

The original intent of the Social Prediction Table is now being tested. In 1953, the New York City Youth Board applied the Table to first graders in high delinquency areas. At about the same time, the Table was applied to first graders in two elementary schools in high delinquency areas in Washington, D. C., under the sponsorship of the Commissioners' Youth Council. The New York experiment was evaluated at mid-term with favorable results. In Washington, D. C., some of the delinquents that were identified in the Table are presently under treatment.

Borstals are juvenile correctional institutions in England housing offenders between the ages of 17 and 21. The goal of the Borstals is the all-around development of character, mind, and body consistent with the capacity of the young persons assigned to its care. There are at least 14 Borstalls. Before a youth is committed to a Borstal, his behavior is studied in a reception unit. On the basis of this study, the judge commits the youngster to the Borstal in which he will receive most


18 Eleanor T. Glueck, op. cit., p. 271.

19 This writer was unable to locate sources reporting on the final outcome of these two experiments, but progress reports in both tend to support the validity of the Social Prediction Table.
appropriate treatment. License from the institution is usually possible within two years. The institutional program is intended to develop a feeling of worth in the individual through a hard but interesting program which includes work, physical training, planned recreation, and academic training. License from the Borstal is based on a progress report which is reviewed by a visiting committee of the judges who make the original commitments. The Borstal system incorporates deliberate and long-term planning for release by fostering increasing contacts with the community outside the institution. The Borstal personnel exhibit a high level of dedication to their work.

The rates for successful parole from English institutions far exceed those rates from American institutions. Using the criteria of freedom from rearrest and imprisonment in the five years following release from the Borstals, the Home Secretary's Reports show seldom less than 60 percent success. In a study done by Healy and Alper, the Borstals attained as much as 84 percent success. This is significant when compared with the Gluecks' study of 500 criminal careers in which the net success rate by the same criteria for Massachusetts reformatory inmates

20 British term for parole.

21 Robison, op. cit., pp. 429-430.

was less than 12 percent. Although the above statistics may represent extremes, they do support the widely acclaimed contention that the Borstal system is relatively successful.

The Borstal Prediction Study was based on a sample of every third boy committed to Borstal Training between mid-1946 and mid-1947. Using information available before a boy was committed, an attempt was made to predict the likelihood that a lad would or would not return to crime again after release. It was necessary to specify a time limit to apparent success. It is generally accepted that if a person is to return to crime, he will do so shortly after release. It was shown in an overview of this study that within three years after release at least 80 percent of those who would ever be reconvicted would have been so convicted. In this overview it was further shown that the sooner a Borstal boy failed, the more serious was the offense.

The sample was divided in half, successes and failures; 60 prediction items were studied. After computing simple correlations for significance for each item between the two halves of the sample, it was found that only four items (previous convictions, longest period in any one job, living

23 Sheldon and Eleanor Glueck, op. cit., p. 271.

in an industrial area or not, and living with parent(s) or not) were relevant to distinguishing between success or failure. The conclusion drawn was that the majority of items which, in other studies, have distinguished between delinquency and non-delinquency, do not distinguish between success and failure within this particular frame of reference. These four items were weighted. The sum of the items was recorded, and the cases were divided into four risk categories according to the sum of the items. In 1952, these four items developed for the 1946-1947 sample were applied to the 1948 intake at a Borstal Reception Center. The average predicted success rate of the top two risk categories was identical to the actual rate. The averaged predicted rate for the bottom two risk categories varied from the actual rate by only one percentage point.

Extensive predictive efforts have been made in California. The Base Expectancy Scoring Method was developed to predict probable parole success. This scoring method pertained to adult offenders and was based on 12 items used to predict parole success. Extensive research on parole predictability for juveniles originated in the implementation of the Community Treatment Project; an ongoing research project of the California Youth Authority. The Project was initiated in 1964 in Stockton and Sacramento. Candidates for the Project were

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chosen at random at the Reception Center. Instead of going on to an appropriate institution, the participants were paroled back to their homes in either of the above two communities. The participants were divided into three groups reflecting maturity levels. Each group was split into nine subclassifications. The participants were placed in caseloads of no more than 12 each and matched with agents with similar personality characteristics. The Project has not been officially evaluated nor validated; however, in interim checks of recidivism of these selected parolees compared with that of the regular parole group, it has been observed that the recidivism rates for the two groups are nearly identical. This supports the proposition that institutionalization is ineffective in altering recidivism rates. This is significant in that the cost of supervision in small caseloads in the community is much lower than the cost of institutionalization.

In 1958, prior to the Community Treatment Project, the Division of Research of the California Youth Authority became interested in the possible use of statistically derived "base expectancy" scores as a means of classification. This interest resulted in a methodological report which, by use

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of actual data, described the successive steps required to arrive as the scores by means of multiple regression equations. Base Expectancy scores are defined as prediction scores obtained from the use of a regression equation in which those variable items are found to contribute uniquely to successful parole performance are weighted.

The Base Expectancy scores derived from the equations have been used primarily as a means of detecting possible treatment effects at various CYA institutions. At that time, the only information available for study consisted of items such as age, prior record, sex, race, the Division of Research applied itself to the problem of systematic collection and recording of data that held promise both of being related to parole performance and improving the Base Expectancy classification of CYA parolees. This effort resulted in the Initial Home Visit Research Schedule (IHVRS) which is composed of a number of multiple-choice items which are related to the parolee, his home, and his family. It is completed by the parole agent on the basis of information gained during his visit with a parent or parent figure at the time of the initial home visit. When the collected data was analyzed, it was found that approximately one-half of the schedule's 57 items were significantly


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related to parole performance.

The writer was unable to locate a source which states the statistical success of the IHVRS schedule in predicting parole performance, but several observations are worthy of mention.

A substantial number of those IHVRS items which have significantly differentiated recidivists from nonrecidivists in the present study were previously found by the Gluecks to have significantly differentiated delinquents from nondelinquents. It would seem that the correlates of parole performance are those of delinquency itself and may possibly pinpoint some of the specifics in the development of socially deviant behavior. An increase in controlled criterion variance of 25 percent was achieved, which was less than what was hoped for. Consequently, the IHVRS is being changed by sharpening response categories of certain variables and substitution of promising items for those items which have been shown to bear no relationship to recidivism. The IHVRS is being changed by sharpening response categories of certain variables and substitution of promising items for those items which have been shown to bear no relationship to recidivism. The IHVRS items have demonstrated their importance as a valuable source of data that is descriptive of the CYA population as a whole. Whereas the type of items found to be related to parole performance in previous CYA studies were of little use in aiding the investigator to understand the origins of delinquent behavior,
there is little question but that the type of items used in the IHVRS provide performance information consistent with the hypothesis that delinquent behavior is the product of a complex interaction between the individual, the family, and the socio-economic environment.

One additional study completed by the Division of Research of the California Youth Authority appears worthy of mention here. The major purpose of the study was to determine whether reducing parole caseloads by half would result in significant improvement in parole performance. Ninety-seven cases were randomly selected from reduced (experimental) and regular (control) caseloads, and were periodically interviewed and followed up for 18 months after release. Each case was rated as to the adequacy of the parole services rendered by the parole agent. In addition, each case was also rated in terms of the amount of support or stress in the environment. The major findings, together with a reservation concerning the measure of supervision, are as follows:

1. Wards judged to have had more adequate supervision did better on parole than those judged to have had less adequate supervision.

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28 Ibid., pp. 11-12.


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2. Ratings of environmental support or stress made before wards were released to parole predicted their later parole performance.

3. More adequate supervision resulted in relatively better parole performance both for wards with more environmental supports and those with more environmental stresses. Wards who had more predicted support and who received the more adequate supervision had the highest success rate. Those who had both more predicted stress and the less adequate supervision had the lowest success rate.

4. Wards in reduced caseloads were more likely to receive adequate supervision than wards in regular-sized caseloads.

5. Although being in a reduced caseload made it more likely that wards would receive more adequate supervision, and although receiving more adequate supervision was related to successful parole performance, wards in reduced caseloads did no better on parole than those in regular caseloads. This result came about because some wards in regular caseloads received the more adequate supervision, and some wards in the reduced caseloads received the less adequate supervision.
6. The central hypothesis emerging from this study is that parole performance is related to the adequacy of supervision. Adequate supervision can occur in regular-sized caseloads as well as in reduced caseloads, but it is more likely to occur in reduced caseloads.

7. A major limitation of this study is the possibility of rater bias in the judgment of level of supervision. Although examination of this matter indicates that it is unlikely to have accounted for the relationships observed, the possibility of rater bias can be rejected only through further research.

The results contained in the above report have only indirect significance to this study. The previous studies cited have all been accomplished on the basis of the construction of predictive tables to forecast parole performance. The latter study points to successful parole performance as being a function of parole supervision. The impact of this study will be considered in a later chapter.

Thus far this discussion has made the assumption that because so much research has developed on prognostic tools to predict delinquency and performance, that this research is destined to supply solutions to problems in crime causation.

To negate this implication it is necessary to examine the basis for employing methodology to construct such a tool, as well as to peruse the criticisms of predictive devices. Sophisticated methodology must necessarily take into account, and attempt to answer, the many criticisms of predictive devices. The following discussion is a summary of criticisms which have been put forth regarding the use of predictive devices.

1. It is not at all certain that the tables have used the most significant factors that have been associated with success and failure on parole. Perhaps all that they have done is to identify the most obvious factors and have missed the subtle but much more fundamental ones, such as attitudes.

2. The records on which the tables are based are inadequate and incomplete. Sometimes this makes it difficult to determine whether a given factor exists in a man's background. Furthermore, not all violations are detected, and therefore factors may receive false weights on the prediction scale.

3. The tables do not provide a satisfactory standard for selecting parolees. No factor bears a 100 percent correlation with outcome on parole.

4. A prediction table reflects the parole conditions which existed for a sample of parolees in a particular place at a certain time. Since the prerelease program, supervision, economic and other factors change continuously; routine adjustment of prediction tables is necessary if they are to retain their alleged usefulness.

5. Prediction tables do not give sufficient consideration to the seriousness of the offense and the reaction of the community to it. The parole board, however, must consider not only the readiness of the prisoner for parole but also the effect of his release on others and the moral code.

6. It is a generally accepted fact that every prisoner reaches a point in his sentence when he is a better parole risk than at any other time. If he is kept beyond this point, his chances for success on parole are likely to decrease. But parole prediction tables do not tell us when to parole, but only attempt to reveal what the chances of success or failure are after a prisoner has been released.

7. Although prediction tables may rate the past and the present with some degree of accuracy, they do not evaluate the immediate future. Who can tell what the reaction of the prisoner will be to the fact of parole? How can we evaluate the influence of one parole officer as contrasted to another?
In order to minimize the shortcomings of a predictive device as summarized in the above criticisms, the device should meet certain criteria. Hermann Mannheim and Leslie T. Wilkins name as basic requirements for prediction tables: simplicity, efficiency, repeatability or reliability, and validity.

The final prediction tables must be easy to apply to any case, no matter how unique the situation. No technical skills other than ability to do simple multiplication, addition, and subtraction should be required. This does not mean that the technique used in obtaining the simple end result must also be simple, the methods must be capable of explanation so that the reader can understand the essential mathematical concepts. The tables must be applicable in a general form to any case. Instructions as to procedure and any tabular matter necessary should be reduced to one schedule, to occupy, say, only one sheet of paper.

An efficient prediction table is one which achieves its purpose with the smallest number of factors which contribute significantly to the specification. In this respect, efficiency and operational simplicity are the same. The maximum use must be made of data. The main loss of efficiency in previous prediction studies has been due to the failure to identify and exclude those factors which overlap. Overlapping can be eliminated by giving careful consideration to factors to be used.

The requirement of repeatability also follows from the requirement of simplicity in that the degree of simplicity
specified as necessary in prediction bars any but elementary skills. No variation in the prediction derived should arise when computed by different persons of average intelligence nor should any different result occur when the computation is carried out by quite inexperienced personnel. Any special skills which derive from experience of dealing with offenders should be exercised independently of prediction computations. Where differences occur between subjective judgments it is safe only to use that portion of the judgment about which agreement can be secured and to regard the remainder as individual variation, or in statistical terms "error."

It is also necessary that the tables be useful and valid. Exact prediction of the future behavior of any individual is impossible, but the system of prediction derived from experience tables has to prove that it can carry out the task of differentiating the likely successes from the likely failures with reasonable validity. In vocational guidance and educational selection the future of the individual is at stake as much as in criminological prediction. In these fields statistical prediction tables (aptitude and I.Q. testing) have been accepted for many years. People seem, however, to be more inclined to accept the judgment of other people than to trust numerical procedures which appear abstract and impersonal. If this prejudice is to be overcome, prediction tables must be more
accurate than other systems of making assessments.

An additional requirement, perhaps related to validity, is the necessity for up-grading existing predictive devices, and flexibility in application of the device. This requirement was touched upon in previous discussion of the State of Illinois program. Social change within the jurisdiction where a particular device is used, as well as changes in law and treatment concepts, necessitate frequent revalidation of the device. Additions, deletions, or modification of factors must be considered and, where applicable, accomplished. The social circumstances of persons to whom predictive devices are applied must also be accurately evaluated at the time of application of the device, and changes therein must be noted appropriately. Failure to take these changes into account may alter the resultant score. Failure to acknowledge these changes after recording the score will alter relative prognosis.

Throughout this chapter the extent of research on prediction has been noted. Significant examples have been cited, and an analysis of predictive devices has been presented. Although the benefits to be derived from the use of a valid predictive device have been acknowledged, it is a fact that even in progressive states which are leaders in prediction

research, parole boards have virtually ignored their use. These boards are reluctant to consider a prediction table an aid in the decision to grant or deny parole. It is necessary that Parole Board bias be examined and understood so that the merits of a prediction device can be presented to them.

Norman Hayner, who during the years 1951-1956 was a member of the Illinois Parole and Pardon Board, identified several attitudes which may help to explain parole boards' reluctance to use prediction tables. He summarized these as:

1) sensitivity to public opinion, desire to encourage constructive use of prison time, firm belief in the uniqueness of each case, frustration of intelligent selection for parole because of legal or traditional restrictions, and reactions to the prediction devices themselves.

2) Although politically appointed, most parole board members are men of integrity and good judgment with little knowledge, however, of sociology, psychology, or psychiatry. They are convinced that if a parole program is to survive, attention must be given to public reactions towards certain crimes. They are aware that it is important to get the reactions of the total community and not just individual and group pressures.

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on the board. The way a crime is reported in the newspapers rarely throws light on causation and frequently errs in factual content, but the extent and nature of the reporting is nevertheless significant.

3) The interest of parole boards in encouraging constructive use of prison time further weakens their confidence in prediction tables. As progress is made in correctional administration, increasing opportunities for self-improvement are available to inmates. Boards want to facilitate the work of prison staffs by rewarding prisoners who take advantage of these opportunities. The majority of prognostic tools give little weight to institutional factors. The common objection by inmates in Illinois that "most actuarial parole predictions are fixed when they enter the prison and cannot be altered by their efforts while confined" is shared by many staff members.

4) Closely related to this interest in a man's prison record is the conviction that each case is unique. Although parole board members may act on the basis of hunches about uniformities in prison backgrounds, they hesitate to admit the hunches. The idea is strongly entrenched that there is no substitute for careful study of the individual case.

5) Boards wish to parole a man when the evidence suggests that he will be able to avoid serious trouble on the outside. Intelligent selection for parole is often made impossible, however, by legal or traditional restrictions. Minimum and maximum sentences have been set so close to each other for such
a large number of Illinois cases that only about half of the prisoners receive the benefit of parole supervision. Many states have deadly weapon statutes that make certain sentences mandatory and prohibit parole until a fixed proportion of that sentence has been served. Some states which traditionally automatically parole after service of a certain part of the sentence prevents intelligent selection for release. In situations such as these the hands of parole boards are tied. Without changes in such laws or traditions, a scientific aid, like a prediction table, is practically useless.

6) Finally, there are negative reactions to certain aspects of the prediction devices themselves. Some of the old-timers in the field of correction, shocked by the high percentages of failure reported by the Gluecks in their *Criminal Careers* rebelled against such studies. Many parole administrators know that the tables do not show what happens if parole is denied. They are aware that the prediction score, which is for a specific group of individuals, may not fit the specific prisoner about whom a decision must be made. They also realize that highly favorable or highly unfavorable scores may serve as a guide in parole decisions, but for most scores that fall in the middle range, the device has limited value.

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Norman S. Hayner, "Why do Parole Boards Lag in the Use of Predicting Scores?", *Pacific Sociological Review*, Fall, 1958, 1:73-75
Many administrators display the skepticism reflected in the statement by Lloyd Ohlin that "no single device which social scientists may contrive can adequately supplant the mature and considered judgment of the parole board members."  

From the point of view of sociologists, prediction scores can and should be used as scientific aids in making parole decisions. Skepticism by parole boards may tend to discourage further inquiry. To insure against this, the above attitudes must be countered. Public opinion is a reality, but public relations programs within a jurisdiction can contribute to confidence in the use of prediction scores. The person or persons constructing the tables can include items which reflect aspects of the prison experience. The trend towards group therapy in one form or another within the institution can tend to deemphasize uniqueness of individual cases. Legal and traditional restrictions can, should, and are being modified, particularly in states where indeterminate sentences are being employed.

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35 Lloyd E. Ohlin, op. cit., p. 69.
CHAPTER THREE

METHODOLOGY

This study is similar to a research project carried out by the California Youth Authority, the Initial Home Visit Research schedule cited in Chapter Two. To understand these similarities, it is necessary to review some techniques and principles adopted in the latter.

The Initial Home Visit Research Schedule (IHVRS) is a questionnaire completed by the parole agent on the basis of information obtained during the initial home visit following release from the institution. The schedule was developed in an attempt to increase the degree of relationship between base 1 expectancy score and parole performance and to uncover performance-related characteristics which indicate propensity for parole success or parole failure.

A construction sample of 906 male wards provided the data 2 for the first analysis of the 47 schedule items, the results of which were compared with those of an analysis performed on a second sample of 1035 male wards. The two samples were combined and chi-squares computed to determine the significance of the relationship between each item and the criterion of parole violation and nonviolation.

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1 Scores which are derived by the optimal weighting of characteristics related to parole performance by means of multiple regression analysis.

2 See Appendix II for Initial Home Visit Research Schedule.
This research project was longitudinal in nature. Eighteen months after the schedule was administered, parole performance was evaluated. Approximately half of the IHVRS items showed a significant relationship to parole performance. The chi-square scores for these items were significant at or above the .05 level. Appendix III lists these characteristics associated with parole violation vs. nonviolation.

In an attempt herein to support the hypothesis that statistically significant differences in personal and social characteristics identify those juveniles who fail on aftercare, and those juveniles who succeed on aftercare in the state of Montana after they are released from the Pine Hills School, two discrete samples will be the subject for analysis. Whereas the IHVRS project was longitudinal over time, this study is cross-sectional and vertical. Time is not a variable. This study is retrospective in that the status of the persons in the samples is known at the time of application of the schedule; whereas in the California Youth Authority study, the resultant status (violation vs. nonviolation) was correlated with response to items on the IHVRS. Twelve of the seventeen items selected for analysis in the schedule in this study were used in the IHVRS. Five of those items were found to be significant at the .05 level in violation vs. nonviolation differentiation. Five items in this study: age at first admission, commitment

3 See Appendix I.
offense, mental rating, prior record and incarceration for first commitment, are variables which have been used in other inventories and have been considered to be important factors in predicting parole performance.

Fourteen items found to have been significant in the IHVRS have been omitted from the schedule constructed for this study. In the former study, sufficient data in the case files was available for cross-validation of the parole agents' impressions. In Montana this situation does not exist. The limited amount of documented background data in the case files would prevent cross-validation, and it would be difficult to distinguish between objectivity and subjectivity on the part of the aftercare counselors on these particular items.

The independent variables in this study are aftercare failures and aftercare successes. A failure, as defined by the Juvenile Aftercare Division is a youth who has made an unsatisfactory adjustment on aftercare and has been recommitted to Pine Hills School either on the basis of a technical violation or by a subsequent juvenile court commitment. Aftercare successes are defined as those discharged whose community adjustment was evaluated as satisfactory, or more specifically,

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4 State of Montana, Department of Institutions, Juvenile Aftercare Division.

5 An administrative decision made with consensus of the aftercare counselor and the director of juvenile aftercare. Behavior which precipitates such a decision includes delinquent or predelinquent overt acts; either confirmed acts or suspected acts.
those who successfully completed a period of aftercare following their first commitment and were subsequently discharged.

Sample A consisting of aftercare failures, and Sample B, consisting of aftercare successes, were drawn cross-sectionally from fiscal year 1967-1968. During this year there were 100 readmissions to the school. Of this initial population, sixty youths who had been recommitted once were found to be appropriate for analysis. Forty readmissions were excluded from the sample for the following reasons:

1) Some in this group represented youths who had been recommitted more than once during the fiscal year, and were incarcerated at the time of this study.

2) Some youths who were initially released to paroling authorities in another state were returned as failures from that state and were never supervised by aftercare counselors in Montana.

3) Some youths were readmitted to the school for miscellaneous reasons including: continuance or completion of an educational program, short-term detention for disciplinary reasons, and preplacement planning.

The sixty aftercare failures in Sample A meet the required

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6 Pine Hills School has an educational program which terminates with completion of the twelfth grade. If a youth is unable to complete high school in his community, return to the institution is an alternative in order that he may achieve this goal.

7 Temporary housing until foster home arrangements are completed.
criteria:

1. All were recommitted for the first time during fiscal year 1967-1968.
2. All were in Montana, either incarcerated or on aftercare at the time the data was gathered.
3. All are or have been under the supervision of an aftercare counselor who is sufficiently familiar with the youth and his family to complete the schedule.
4. Background data exists in the case files in the Department of Institutions to validate the manner in which the schedules were completed by the aftercare counselors.

Sample B is comprised of 60 youths who were discharged after one period of incarceration after having made a satisfactory adjustment on aftercare. Of the initial 187 discharges, 143 met this criterion. The remaining 44 represented youths who were discharged for the following reasons:

1) Overall adjustment was unsatisfactory but did not necessitate incarceration.
2) Whereabouts unknown.
3) Returned to Montana from another state with recommendation for discharge from that state.
4) Discharged at time of release from institution.

Race and place of residence were not considered for inclusion in the sample.
The Department of Institutions granted permission for this study to commence and made available all case files and secondary information for incorporation in the study with the stipulation that anonymity be maintained for those youths in the samples. The initial population for each sample is listed chronologically by case number on IBM print-out sheets. Sample A includes the total population of failures conforming to the above criterion.

Sample B is a selected sample of that total population. Because of the time factor and difficulties in communication, the construction of a random sample was impractical. The principles involved in the statistical analysis are not dependent upon random sampling.

All of the 143 case numbers were cross-classified according to name and county of residence. The latter was necessary in order to match the youth with the appropriate aftercare counselor. Every third case was selected for inclusion in the sample until a total of sixty was reached.

The aftercare counselors in Missoula, Great Falls, Havre, Billings, Butte, and Helena were interviewed in depth at their respective offices. The nature of the study was explained including the hypothesis, and methodology. The items on the schedules were thoroughly explained. The schedules, with name and case numbers indicated, were then dispersed to the appropriate counselors. After it was confirmed that the counselors had sufficient knowledge of the youths who had been discharged,
they each completed five of the schedules. This provision allowed for the discussion of questions on any of the items which arose. The counselors were then instructed to complete the schedules in a reasonable period of time and return them to the source.

During this process, it was discovered that the aftercare counselors did not have sufficient knowledge of several of the youths whose names appeared on the schedules. This situation existed because those youths had been discharged early in the fiscal year shortly after the counselors had assumed their duties. To correct this situation, replacement schedules were selected from the print-out, and confirmation of adequate case familiarity was obtained.

When the schedules were returned 100% response was confirmed. Some of the counselors did not indicate a choice in the items which asked for commitment offense and mental rating. These items were later completed from information contained in the central files in Helena.

STATISTICAL METHODOLOGY

The data for analysis in this study is nominal in nature. That is, numbers designate classes which are representative of the two independent variables; aftercare successes and aftercare failures. Numbers also designate categories which are represented in the dependent variables which describe social characteristics. The scales which are constructed are nominal rather than ordinal, the latter being based on rank order instead of frequency distribution.
In testing for statistical significance with nominal data, parametric as well as nonparametric tests are applicable. Characteristics of the data indicate the desirability for the application of a nonparametric test. Sidney Siegel cites the following advantages of nonparametric tests:

1. The tests were "distribution-free," one of their primary merits being that they do not assume that the scores under analysis were drawn from a population distributed in a certain way.
2. Nonparametric techniques may be used with scores which are not exact in any numerical sense.
3. Computational simplicity is a characteristic of these techniques.
4. They are useful with small samples.

Chi-square ($\chi^2$) is the primary statistic employed to measure significance in response variation for the dependent variables. The formula used to derive the value for chi-square is that used by Mueller and Schuessler. As $\chi$ increases, the dissimilarity of the relationship of the independent variables increases for each dependent variable. The level of significance is set at $p = .05$. The coefficient of contingency ($C$) is calculated to measure the strength of the chi-square relation.

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ship. Percentages for rows and columns are also calculated to provide the basis for a qualitative analysis of the quantitative data within the cells of each chi-square table. Omar S. Goode developed a program which computes percentages, chi-square, and coefficient of contingency.

Numbers were assigned to response categories for the dependent variables on the schedules, as well as for differentiation of categories of the independent variables. Frequency distribution was tabulated and tables were constructed for the independent variables in each sample. The observed frequencies were arranged in \( k \times r \) (column by row) contingency tables. The expected frequencies were then computed for the cells in each table by multiplying the marginal totals common to that cell and dividing this product by \( N \), the total number of cases.

Siegel directs that if more than 20 percent of the cells have expected frequencies of less than 5, or if any cell has an expected frequency of less than 1, it is necessary to combine categories to increase the expected frequencies which are deficient.

After computing expected frequencies, the above condition was found to exist in twelve of the tables. Cells were collapsed in the affected tables to meet the requirement. Cell collapsing

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10 Omar S. Goode, "Revised Two-way Count," College of Commerce, Data Center, Ohio State University, 1966.

11 Siegel, op. cit., p. 200.
was accomplished in a manner which did not change the meaning of response in the affected dependent variables. See Appendix IV for revised categories in the schedules.

The data was then transferred to IBM cards for use with the Omar Goode computing program. After the computer run, the computed values for chi-square were compared with critical values for $\chi^2$ for acceptance or rejection of the null hypothesis for each of the dependent variables. The strength of the relationship of the independent variables was noted in terms of $C$. The relationship of the independent variables in each of the tables will be discussed in the next chapter.

An additional dependent variable describing length of incarceration on the first commitment was treated separately. The means test was applied to this variable instead of chi-square analysis. This deviation in the above statistical methodology will be discussed in the following chapter.
CHAPTER FOUR

ANALYSIS OF THE DATA

This chapter, which includes compilation of the data, represents the implementation of Methodology described in Chapter Three. Tables one through seventeen pertain to the between-group analysis of the seventeen dependent variables. The first sixteen tables are identical in construction. An explanation of these tables, as well as table seventeen, will precede the quantitative analysis with respect to acceptance or rejection of the null hypothesis for each variable. This chapter concludes with a brief qualitative analysis of the data.

Each table is a statistical analysis of one of the seventeen variables. The data in tables one through sixteen is expressed in percentages which are computed from the frequency distribution of the cells. The left-hand column lists the categories within each dependent variable. The two columns under subheading I indicate the percentage response in each sample (n = 60) to the particular category. These two columns are reflective of the frequency distribution of raw data. For purposes of continuity this frequency distribution is expressed in percentages in the tables. The reader may inspect these

1Asterisks after table headings indicate that the same variable was used in the IHVRS study and was significant at the .05 level.
two columns for the chi-square cell distribution and compare the distribution to the value for chi-square in each table. This allows for sight validation of the computed value of \( x^2 \). The column under subheading II indicates the percentage response of the two-sample total \((n = 120)\) to the particular category. The two columns under subheading III indicate the proportion response of the total \((n - 120)\) in the categories with differentiation between success and failure. In the columns which distinguish between success and failure, the symbols S and F are used respectively. Chi-square values \( x^2 \), degrees of freedom \( (df) \), coefficient of contingency \( c \), and the critical level of probability for \( x \) are noted at the bottom of each table.

The categorical responses in eleven of the tables require that the aftercare counselor evaluate a relationship of the youth to his parent or parent substitute. In most instances this relationship is that of youth to natural parent. However, in some instances it was noted that the youth lived with different parent figures other than natural parents during his life. In completing the schedule the counselors were asked to rate the relationship of the youth to the family he resided with which had the most marked effect on his life during the formative years. These parent substitutes include siblings.

The maximum value for \( C \) in a 2 x 2 table is \( .707 \). The maximum value for \( C \) in a 3 x 3 table is \( .818 \). There is no standardized measurement for maximum values of \( C \) in 2 x n tables. The only obvious method of applying a correction factor for \( C \) for 2 x n tables is by interpolation. Since there is no precedent for this procedure, no attempt is made to adjust \( C \) in these tables. \( C \) is merely noted for its approximation to \( .707 \).
relatives, and nonrelatives. These exceptions to the rule are not cited as they occur as deviations from the norm; the norm being consistent residence with natural parent or parents.

At the time the data was collected some youths were residing with foster parents, friends, or relatives. These situations, where applicable, were defined as temporary living arrangements when the parent figures were not primary parent figures with whom the youth resided prior to commitment. These temporary short-term living arrangements, arranged for by the aftercare counselor, are not reflected in response to categories by the aftercare counselors. The responses revert back and describe the relationships in the primary family. In this chapter, "parent" refers to natural parent as well as "substitute" parent; unless the relationship is otherwise specifically defined.

**TABLE I**

**MARITAL STATUS OF PARENTS***

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>F</td>
<td>S</td>
<td>F</td>
</tr>
<tr>
<td>Not Married</td>
<td>6.7</td>
<td>0</td>
<td>3.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Divorced or Sep.</td>
<td>46.6</td>
<td>58.3</td>
<td>52.5</td>
<td>44.4</td>
</tr>
<tr>
<td>Broken by Death</td>
<td>13.4</td>
<td>10.0</td>
<td>11.7</td>
<td>57.1</td>
</tr>
<tr>
<td>Unbroken Discordant</td>
<td>11.6</td>
<td>10.0</td>
<td>10.8</td>
<td>53.8</td>
</tr>
<tr>
<td>Unbroken Congenial</td>
<td>21.7</td>
<td>21.7</td>
<td>21.7</td>
<td>50.0</td>
</tr>
</tbody>
</table>

\[ x^2 = 5.1403 \quad df = 4 \quad C = .2866 \quad p > .05 \]

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MARITAL STATUS OF PARENTS

Marital status of parents is not a statistically significant characteristic in differentiating between success and failure; the null hypothesis is accepted.

The insignificance of $x$ in Table I is seen in the columns under subheading III. The percentage distribution of the category "not married" is sharply contrasting because of low frequency response to that category; but in the remaining categories the percentage distribution does not differ markedly.

TABLE II

EMPLOYMENT STATUS OF FATHER

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>F</td>
<td>S</td>
<td>F</td>
</tr>
<tr>
<td>Part Time</td>
<td>16.7</td>
<td>8.3</td>
<td>12.5</td>
<td>66.7</td>
</tr>
<tr>
<td>Intermittant</td>
<td>10.0</td>
<td>15.0</td>
<td>12.5</td>
<td>40.0</td>
</tr>
<tr>
<td>Full Time</td>
<td>35.0</td>
<td>56.7</td>
<td>45.8</td>
<td>38.2</td>
</tr>
<tr>
<td>Father Absent</td>
<td>38.3</td>
<td>20.0</td>
<td>29.2</td>
<td>65.7</td>
</tr>
</tbody>
</table>

$2 \chi = 8.7965 \quad df = 3 \quad C = .3696 \quad p < .05$

EMPLOYMENT STATUS OF FATHER

Employment status of the father is a variable which is significant at the .05 level; the null hypothesis is not accepted.

The following conclusions may be drawn from the data:
1) 56.7% of the failures had fathers who were employed full time as opposed to 35.0% of the successes who had fathers who were employed full time.

2) 20.0% of the fathers of failures were absent from the home whereas 38.3% of the fathers of successes were absent from the home.

3) A stable employment pattern appears to be more prevalent for the failure group than for the success group.

\[ x \] is significant in this study. In the IHVRS study, the success vs. failure ratio of "full-time" employment of father is 35.0%: 56.7%; whereas in the latter, the same ratio is 58.4%: 41.6%.

Secondary conclusions may be drawn from inspection of Table II.

Table III

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>F</td>
<td>S</td>
</tr>
<tr>
<td>Never</td>
<td>38.3</td>
<td>40.0</td>
<td>39.2</td>
</tr>
<tr>
<td>Occasionally</td>
<td>50.0</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Often</td>
<td>11.7</td>
<td>10.0</td>
<td>10.8</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\[ x = 0.0983 \quad df = 2 \quad C = .0405 \quad p > .05 \]

Although absence from the home is an important factor in itself, it precludes rating employment status. It is significant that 29.2% of the two-sample total was applicable to this category.

FREQUENCY OF DISCUSSION OF PROBLEMS WITH MOTHER

This variable is not statistically significant at the .05 level. This relationship is readily seen under subheading III of Table III. The percentage distribution does not differ markedly. The null hypothesis is accepted.

From inspection of the table, it appears that frequency of discussion of problems with the mother is low for the two sample total. For the categories "never" and "occasionally" the percentage response is 39.2 and 50.0 respectively. The frequency of discussion of problems with mother is slightly higher for the success sample than for the failure sample.

<table>
<thead>
<tr>
<th>Category</th>
<th>I S</th>
<th>II S</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Readily Accepts</td>
<td>1.7</td>
<td>3.3</td>
<td>2.5</td>
</tr>
<tr>
<td>Accepts</td>
<td>30.0</td>
<td>31.7</td>
<td>30.8</td>
</tr>
<tr>
<td>Indifferent</td>
<td>25.0</td>
<td>23.3</td>
<td>24.2</td>
</tr>
<tr>
<td>Dislikes</td>
<td>25.0</td>
<td>25.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Markedly Dislikes</td>
<td>18.3</td>
<td>16.7</td>
<td>17.5</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 0.4426 \quad df = 4 \quad C = .0857 \quad p > .05 \]

ATTITUDE TOWARD SCHOOL

This variable is not significant at the .05 level; the null hypothesis is accepted. Under subheading III, the proportion of percentage distribution for the category "readily
accepts" is erratic because of low frequency response. Contrast between the samples for the remaining categories is slight; 2.5% of the two-sample total readily accepted school; 17.5% of this total markedly disliked school. Further conclusions are not meaningful because of response similarity between samples for the remaining categories.

TABLE V

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>F</td>
<td>S</td>
<td>F</td>
</tr>
<tr>
<td>None</td>
<td>21.7</td>
<td>21.7</td>
<td>21.7</td>
<td>50.0</td>
</tr>
<tr>
<td>Slight</td>
<td>58.3</td>
<td>55.0</td>
<td>56.6</td>
<td>51.5</td>
</tr>
<tr>
<td>Marked</td>
<td>20.0</td>
<td>23.3</td>
<td>21.7</td>
<td>46.2</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

\[ \chi^2 = 0.2126 \quad \text{df} = 2 \quad C = 0.0595 \quad p > 0.05 \]

SELF RESPECT OF FAMILY

This variable is not significant at the .05 level; the null hypothesis is accepted.

The highest two-sample total percentage response is in the "slight" category. The "marked" category is higher for the failure group. While the "none" category is evenly distributed between samples, response of the two-sample total to the "none" and "marked" categories are evenly distributed.
TABLE VI
EMOTIONAL TIES OF MOTHER

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>F</td>
<td>S</td>
<td>F</td>
</tr>
<tr>
<td>Excessive</td>
<td>11.7</td>
<td>20.0</td>
<td>15.8</td>
<td>36.8</td>
</tr>
<tr>
<td>Warm</td>
<td>36.6</td>
<td>43.3</td>
<td>40.0</td>
<td>45.8</td>
</tr>
<tr>
<td>Indiff. or Hostile</td>
<td>36.7</td>
<td>25.0</td>
<td>30.9</td>
<td>59.5</td>
</tr>
<tr>
<td>Mother Absent</td>
<td>15.0</td>
<td>11.7</td>
<td>13.3</td>
<td>56.3</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

\[ x = 3.2234 \quad df = 3 \quad C = 0.2287 \quad p > 0.05 \]

EMOTIONAL TIES OF MOTHER

This variable is not significant at the .05 level; the null hypothesis is accepted.

13.3% of the two-sample total responded to the "mother absent" category. Emotional ties for this category are not measured. For 40.0% of the two-sample total, emotional ties were warm, with 36.6% and 43.3% for successes and failures respectively. Excessive emotional ties were more prevalent for the failure group.
TABLE VII
EMOTIONAL TIES OF FATHER

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S  F</td>
<td>S  F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excessive</td>
<td>1.7 6.7</td>
<td>4.2 20.0</td>
<td>80.0 100.0</td>
<td></td>
</tr>
<tr>
<td>Warm</td>
<td>21.6 30.0</td>
<td>25.8 41.9</td>
<td>58.1 100.0</td>
<td></td>
</tr>
<tr>
<td>Indiff. or Hostile</td>
<td>33.4 40.0</td>
<td>36.7 45.5</td>
<td>54.5 100.0</td>
<td></td>
</tr>
<tr>
<td>Father Absent</td>
<td>43.3 23.3</td>
<td>33.3 65.0</td>
<td>35.0 100.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100.0 100.0</td>
<td>100.0 100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ \chi^2 = 6.5701 \quad df = 3 \quad C = 0.3222 \quad p < 0.05 \quad p > 0.10 \]

EMOTIONAL TIES OF FATHER

This variable is insignificant at the .05 level; the null hypothesis is accepted. \( \chi^2 \) is significant at the .10 level.

33.3% of the two-sample total responded to the "father absent" category. Emotional ties for this category are not measured.

Inconsistency is noted for emotional ties of the mother and of the father. For the latter, the greatest percentage of the two-sample total responded to the "indifferent or hostile" category with response being higher for the failure group.

Response to the "excessive" category is similar in Table VI and Table VII. Higher percentage response for "mother absent" and "father absent" is noted for the success group.
The most frequent response for the two-sample total was in the "indifferent or hostile" category with 40.0% response in the failure group for this category.

**TABLE VIII**

**FATHER'S DISCIPLINE OF MINOR**

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>F</td>
<td>S</td>
</tr>
<tr>
<td>Lax</td>
<td>28.3</td>
<td>38.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Inconsistent</td>
<td>25.0</td>
<td>23.4</td>
<td>24.2</td>
</tr>
<tr>
<td>Firm</td>
<td>5.0</td>
<td>15.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Father Absent</td>
<td>41.7</td>
<td>23.3</td>
<td>32.5</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 7.0372 \quad \text{df} = 3 \quad C = .3328 \quad p < .05 \]

**FATHER'S DISCIPLINE OF MINOR**

This variable is insignificant at the .05 level; the null hypothesis is accepted. \( \chi^2 \) was found to be significant at the .10 level.

"Father Absent" was noted in 32.5% of the two-sample total; 41.7% and 23.3% for successes and failures respectively. Lax discipline dominated the two-sample total and is higher for the failure group. Inconsistent discipline was almost evenly distributed for the two samples.
### TABLE IX
**MOTHER’S SUPERVISION OF MINOR**

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>F</td>
<td>S</td>
</tr>
<tr>
<td>Inadequate</td>
<td>71.2</td>
<td>76.7</td>
<td>73.9</td>
</tr>
<tr>
<td>Adequate</td>
<td>13.5</td>
<td>11.6</td>
<td>12.6</td>
</tr>
<tr>
<td>Mother Absent</td>
<td>15.3</td>
<td>11.7</td>
<td>13.5</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\[ x^2 = 0.4900 \]
\[ df = 2 \]
\[ C = .0906 \]
\[ p > .05 \]

**MOTHER’S SUPERVISION OF MINOR**

This variable is insignificant at the .05 level, the null hypothesis is accepted.

In measuring adequacy vs. inadequacy for each group, very little frequency distribution response differentiation exists under subheading III. No inferences can be drawn from Table IX, taking into account the value of \( x^2 \).

### TABLE X
**FATHER’S SUPERVISION OF MINOR**

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>F</td>
<td>S</td>
</tr>
<tr>
<td>Inadequate</td>
<td>56.7</td>
<td>68.3</td>
<td>62.5</td>
</tr>
<tr>
<td>Adequate</td>
<td>3.3</td>
<td>8.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Father Absent</td>
<td>40.0</td>
<td>23.3</td>
<td>31.7</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\[ x^2 = 4.5708 \]
\[ df = 2 \]
\[ C = .2709 \]
\[ p < .05 \]
\[ p > .10 \]
FATHER'S SUPERVISION OF MINOR

This variable is insignificant at the .05 level, the null hypothesis is accepted. \( x^2 \) was found to be significant at the .10 level.

31.7% of the two-sample total response to the "father absent" category is characterized by 40.0% and 23.3% for success and failures respectively. This high rate for the success group skews the responses to the "inadequacy" and "adequacy" categories.

TABLE XI

<table>
<thead>
<tr>
<th>COHESIVENESS OF FAMILY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Cohesive</td>
</tr>
<tr>
<td>Not Cohesive</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

\[ x^2 = 1.1431 \quad df = 1 \quad C = .1379 \quad p \geq .05 \]

COHESIVENESS OF FAMILY

This variable is insignificant at the .05 level, the null hypothesis is accepted.

63.0% of the two-sample total indicated family cohesiveness. Between-group contrasts are insignificant.
### TABLE XII
RATING OF HOME FOR MINOR'S RETURN*

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undesirable</td>
<td>38.3</td>
<td>36.7</td>
<td>37.5</td>
<td>51.1</td>
</tr>
<tr>
<td>Desirable</td>
<td>61.7</td>
<td>63.3</td>
<td>62.5</td>
<td>49.3</td>
</tr>
</tbody>
</table>

\[ x^2 = 0.0355 \quad df = 1 \quad C = 0.0243 \quad p > .05 \]

RATING OF HOME FOR MINOR'S RETURN

This variable is insignificant at the .05 level, the null hypothesis is accepted.

This item on the schedule calls for an over-all evaluation of the desirability of the minor's previous home living situation following first commitment for the success group, following subsequent commitment for the failure group. There is no marked difference in the response in distinguishing between desirability and undesirability for both groups.
## TABLE XIII

### AGE AT FIRST COMMITMENT

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in Years</td>
<td>S</td>
<td>F</td>
<td>S</td>
<td>F</td>
</tr>
<tr>
<td>10 - 12</td>
<td>1.7</td>
<td>10.0</td>
<td>5.8</td>
<td>14.3</td>
</tr>
<tr>
<td>13</td>
<td>11.6</td>
<td>10.0</td>
<td>10.9</td>
<td>53.8</td>
</tr>
<tr>
<td>14</td>
<td>18.4</td>
<td>25.0</td>
<td>21.6</td>
<td>42.3</td>
</tr>
<tr>
<td>15</td>
<td>23.3</td>
<td>33.3</td>
<td>28.4</td>
<td>41.2</td>
</tr>
<tr>
<td>16</td>
<td>23.3</td>
<td>16.7</td>
<td>20.0</td>
<td>58.3</td>
</tr>
<tr>
<td>17</td>
<td>21.7</td>
<td>5.0</td>
<td>13.3</td>
<td>81.3</td>
</tr>
<tr>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ \chi^2 = 12.2392 \quad df = 5 \quad C = .4302 \quad p < .05 \]

**AGE AT FIRST COMMITMENT**

This variable is significant at the .05 level, the null hypothesis is not accepted.

A relationship between age at time of commitment and frequency of aftercare success exists. This relationship is most readily seen in Table XIII under subheading III. As age at first commitment rises, the proportion of the two-sample total who are successes also rises. When age at first commitment is low, chance for aftercare failure is high. When age is high, chance for aftercare failure is low.

Secondary conclusions may be drawn from inspection of Table XIII.
TABLE XIV

NATURE OF OFFENSE

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>F</td>
<td>S</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delinquent</td>
<td>76.3</td>
<td>73.3</td>
<td>74.8</td>
<td>50.6</td>
<td>49.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Predelinquent</td>
<td>23.7</td>
<td>26.7</td>
<td>25.2</td>
<td>46.7</td>
<td>53.3</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 0.1361$, $df = 1$, $C = .0478$, $p > .05$

NATURE OF OFFENSE (First Commitment)

This variable is insignificant at the .05 level, the null hypothesis is accepted.

The category "delinquent" represents all commitments resulting from one or more specific law violations. The category "predelinquent" represents all commitments resulting from activities such as truancy, incorrigibility (at home or at school), runaway, and vagrancy.

Although 74.8% of the two-sample total reflects youths who were committed for delinquent acts, subheading III shows little differentiation between aftercare successes and aftercare failures.
TABLE XV

MENTAL RATING

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th></th>
<th>II</th>
<th></th>
<th>III</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>F</td>
<td>S</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Average</td>
<td>6.7</td>
<td>10.0</td>
<td>8.3</td>
<td>40.0</td>
<td>60.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td>58.3</td>
<td>63.3</td>
<td>60.9</td>
<td>47.9</td>
<td>52.1</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Dull Normal</td>
<td>31.7</td>
<td>21.7</td>
<td>26.6</td>
<td>59.4</td>
<td>40.6</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ x^2 = 1.8482 \quad df = 3 \quad C = 0.1742 \quad p > .05 \]

MENTAL RATING

This variable is insignificant at the .05 level, the null hypothesis is accepted.

When the aftercare counselors did not know the mental rating of the youths, the central case files were examined. The same I.Q. tests were not administered to all youths at Pine Hills School. The files contained test scores from various tests, and in some instances the test scores reflected previous testing, usually accomplished by the public school, prior to the youth's arrival at Pine Hills School. The category labels represent a general classification based on analysis of the information and test scores in the central files.

Subheading III indicates little proportion differentiation between the success group and the failure group. The category "normal" accounts for 63.3% of the two-sample total; the category "dull normal" accounts for 26.6% of the two-sample total.
### PRIOR DELINQUENT CONTACTS

<table>
<thead>
<tr>
<th>Category</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 or 2</td>
<td>13.3</td>
<td>16.7</td>
<td>40.0</td>
<td>100.0</td>
</tr>
<tr>
<td>3 thru 5</td>
<td>46.7</td>
<td>47.5</td>
<td>49.1</td>
<td>100.0</td>
</tr>
<tr>
<td>6 or more</td>
<td>40.0</td>
<td>35.8</td>
<td>44.2</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

\[
\chi^2 = 1.3988 \quad df = 2 \quad C = 0.1518 \quad p \geq 0.05
\]

**PRIOR DELINQUENT CONTACTS**

This variable is insignificant at the .05 level, the null hypothesis is accepted.

Prior delinquent contacts reflect known involvement in delinquent or predelinquent acts or activities which resulted in referral to the county probation officer prior to commitment to the Pine Hills School. The design of this study did not require that such involvement be substantiated by finding of fact in the juvenile court.

There is little proportion differentiation between the success group and the failure group as noted under subheading III. The category "3 thru 5" accounts for 48.3% of the two-sample total.
<table>
<thead>
<tr>
<th>Months</th>
<th>Success Frequency</th>
<th>Failure Months Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
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<td>1</td>
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<td>68</td>
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TABLE XVIIB

LENGTH OF INCARCERATION FOR FIRST COMMITMENT

MEAN

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<th>Total Months Incarcerated</th>
<th>Mean</th>
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<td>S</td>
<td>1310</td>
<td>22.0</td>
<td>4.5</td>
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<td>F</td>
<td>820</td>
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<td>Total (S &amp; F)</td>
<td>2130</td>
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\[ S \text{ D}_{X} = 2.64 \quad z = 3.03 \quad p < .01 \]

LENGTH OF TIME INCARCERATED FOR FIRST COMMITMENT

The data in Table IXVVA was subjected to a means test. The z score yielded statistical significance at the .01 level, the null hypothesis is not accepted.

Length of time incarcerated for first commitment appears to be a factor for these two samples. There is considerable disparity between the means of the samples; and there is disparity in deviation from the total mean and the mean for each sample. The group that succeeded on aftercare spent a significantly longer period of time in the institution than did the group that failed on aftercare.

ANALYSIS SUMMARY

In this study, the main hypothesis which states that statistically significant personal and social characteristics differentiate between aftercare successes and aftercare failures is not accepted. Three of the specific hypotheses
are accepted. The three of the seventeen variables which are significant are:

1. Employment Status of Father. A stable employment pattern for the father was more prevalent for the failure group than for the success group.

2. Age at First Commitment. Higher failure rates are noted for low age commitments. Low failure rates are noted for higher age commitments.

3. Length of Time Incarcerated for First Commitment. The mean length of time spent in the institution was significantly longer for the success group than for the failure group.

Although the main hypothesis is not substantiated, it is possible to construct profiles for aftercare successes and aftercare failures. These profiles are typologies. Figures I and II present profiles of the typical aftercare success and aftercare failure, respectively, in terms of the most frequent response to the particular category in each dependent variable. Note the similarities of the profiles.
FIGURE I
PROFILE OF A SUCCESS

Table

I  Parents are divorced or separated.*
II  Father is out of the home.
III  Youth occasionally discusses problems with mother.*
IV  Youth has accepting attitude toward school.*
V  Self-respect of family is slight.*
VI  Emotional ties of mother reflect indifference or hostility.
VII  Father absent.
VIII  Father absent
IX  Youth is inadequately supervised by mother.*
X  Youth is inadequately supervised by father.*
XI  Family is cohesive.*
XII  Home is rated as desirable for youth return.*
XIII  Youth was fifteen or sixteen years of age at time of first commitment.
XIV  Youth was initially committed for a delinquent act.*
XV  Youth is of normal intelligence.*
XVI  Youth had 3 - 5 delinquent contacts prior to commitment.*
XVII  Youth was incarcerated for twenty-two months.

* Same for profile of a failure.
FIGURE II
PROFILE OF A FAILURE

Table

I  Parents are divorced or separated.
II  Father is employed full time.
III  Youth occasionally discussed problems with mother.
IV  Youth has accepting attitude toward school.
V  Self-respect of family is slight.
VI  Emotional ties of mother are warm.
VII  Emotional ties of father reflect indifference or hostility.
VIII  Father's discipline of minor is lax.
IX  Youth is inadequately supervised by mother.
X  Youth is inadequately supervised by father.
XI  Family is cohesive.
XII  Home is rated as desirable for youth's return.
XIII  Youth was fifteen years of age at first commitment.
XIV  Youth was initially committed for a delinquent act.
XV  Youth is of normal intelligence.
XVI  Youth had 3 - 5 delinquent contacts prior to first commitment.
XVII  Youth was incarcerated for fourteen months on first commitment.
CHAPTER FIVE

CONCLUSIONS

The purpose of this chapter is two-fold. First, summary statements regarding Chapter Four will be set forth. Second, the implications of this study for future research and inquiry will be suggested.

The prediction device which was effective with a sample of California Youth Authority wards in 1960 is not applicable in differentiating between aftercare success and aftercare failure in Montana in 1968.

The relationship of only one of the twelve variables used in the California study was found to be significant here; however, this particular variable, Employment Status of Father, was not significant in the California study. With this variable, the assumption can be made that in Montana, those youths who succeed on aftercare are most likely to have fathers who are either absent from the home, or not employed full time. This assumption, drawn from the data, conflicts with a supposition of multiple causation theory which states that sporadic employment of the father and one-parent families are characteristics which could be contributing factors to the propensity for delinquent behavior. The frequency distribution for this variable needs validation by subsequent sampling before such an assumption can be supported or rejected. Research in other states which relates to family employment pattern should be
examined to determine if the situation in Montana contrasts with that in other states. If this is found to be true, research in Montana should proceed in order to discover reasons for this peculiarity.

It is to be understood, however, that other social, economic, and psychological variables which have not been explored within the context of this study, may have bearing on the relative outcome of this particular dependent variable. It is important to bear in mind that Employment of Father was judged during the period of time that aftercare services were rendered. Further study of this particular variable may reveal that prior to commitment, the employment status of the father may have differed. That is, when delinquent behavior patterns first developed, the employment status of the father may have indicated instability; whereas, during the period of time the youth was on aftercare, the employment pattern may have stabilized. This explanation is more in keeping with the supposition stated above.

Another variable, Age at First Commitment, was found to be significant in this study. Subsequent sampling is suggested here also, in order to validate frequency distribution. If the distribution is validated, the popularly held notion that early intervention in delinquent behavior patterns for early deterrance from continued delinquency is not supported, at least not for the method of intervention known as institutionalization. The damaging effects of early institutionalization are seen in the propensity of those youths for later failure on aftercare. The
program at Pine Hills School is in need of evaluation to determine if those youths twelve years of age and younger are being offered adequate rehabilitative services. If the program is found to be deficient for these youths, techniques of intervention other than institutionalization under existing conditions at Pine Hills School should be considered and implemented.

The third variable found to be significant was Length of Time Incarcerated for First Commitment. The frequency distribution of the data for this item also negates a popular notion. The rationale used in arguing for the indeterminate sentence rests on the premise that a person in a correctional institution reaches a point in the rehabilitation program after which he will cease to derive benefit, and if held in the institution past this point, his chances for a favorable adjustment on parole are lessened. A broader generalization which has been put forth states that prolonged periods of incarceration are detrimental to parole outcome. In this study, the mean for the two-sample total was 17.5 months. The mean for the success sample and the failure sample was found to be 22 months and 14 months, respectively; the deviation from the mean greater for the success group. This finding suggests that those who were failures on aftercare were released from the institution too soon.

There is no correlation in statistical significance for variables between this study and the California study. This fact supports the statement made in Chapter Two, that a prediction device may not withstand the test of time and place.
because repeatability is not guaranteed when the device is applied to a population at a later date and/or a different locale. It may be assumed here that there is inherent difference between the Montana samples and the California sample.

Implications for Future Research

A second effort to validate the IHVRS study after postulation of the hypothesis stated in this study could be attempted with methodological duplication of the California study. A study of this nature would be longitudinal, not retrospective. The aftercare counselors would complete the schedule at the time of the initial home visit. Sample follow-up would occur at the end of the eighteen-month period. The relationship between success and failure for each variable would proceed with chi-square analysis for cross-validation of the two studies. Basic to a study of this nature is the necessity for similarity of operational definitions of success vs. failure and nonviolation vs. violation. Criteria and policy for recommitment in Montana and violation in California need to be the same if correlations are to be drawn from subsequent differentiation between success and failure.

If the object of subsequent research is merely to apply the California schedule to the Montana population and draw conclusions based only on the Montana population, then validation should be attempted by comparison of a construct sample with a subsequent. If statistical significance is established
under these conditions, then assumptions and conclusions are drawn within the context of the Montana population exclusively. In other words, although the prediction device originated with another population, conclusions drawn are independent of that other study. The data would be analyzed in terms of circumstances and conditions existing in Montana at that time.

Another avenue of research is open in the event that further attempts to apply the IHVRS study in Montana are abandoned. This would be the construction of a new prediction device. Prediction devices, as they are employed elsewhere, aid in the development and up-dating of rehabilitative programs. The primary intent of these programs is to deter persons from continued delinquent or criminal behavior. It is hoped that recidivism rates may be reduced by the application of a reliable prediction device. A person possessing characteristics which are thought to be contributing factors in continued delinquent behavior could be availed of individualized treatment either in the institution or in his community, depending upon when the prediction of future behavior is made. In Montana, several problem areas exist which, under present circumstances, hamper the construction and use of a reliable prediction device. It is essential that persons utilizing a prediction device have an adequate amount of knowledge of those who are the subject of prediction. These areas which need to be investigated and researched will be discussed briefly.

When a youth arrives at Pine Hills School, little or no documentation of his social and psychological make-up is
available to school staff. Cursory diagnosis and classification is accomplished shortly after reception at the school. Much of the information is unsubstantiated after being given voluntarily by the youth. The great majority of youths have been known by their respective probation officers prior to commitment, however the probation officers seldom attach social background information to the commitment order. It is conceivable that this kind of information is also lacking at the time of commitment, and that some commitments are inappropriately ordered by the courts. There is a need to coordinate the probation officers throughout the state in development of policies and procedures in the gathering of case data, particularly that data of social and historical significance. This data should be systematically ordered in a case file for each youth referred to the probation officer, from first referral to commitment, inclusively. This social history should be made available to the school staff prior to, or at the time of, arrival at the school.

Montana is at a disadvantage in that there is only one State School for male delinquents between the ages of ten and twenty-one. In view of this situation it is imperative that the institution program meet the needs of the broad cross-section of youths, particularly in the area of individualized treatment for younger boys. The existing program should be evaluated and modified as necessary so as to reduce the chances of aftercare failure for this segment of the school population. Maintenance of family ties should be stressed and accomplished at every
opportunity. Social data which is reflective of all aspects of institution life should be gathered and included in the case file in order that the youth's progress may be evaluated. This evaluation is essential in order to decide upon the optimum time for release. Exceptionally long or short periods of incarceration may thus be avoided.

With these provisions for dissemination of information, knowledge, and insight relative to the youth's personality, family situation, and community circumstances, efforts may proceed for the construction of a suitable prediction device. Once constructed, the device could measure prediction at the time of the youth's arrival at the school. The nature of response to the items could point to particular needs which might be met by a particular aspect of the school program (if improvised). Adjusting the milieu treatment program to meet these individual needs may help to reduce the chance for failure upon release.

If the device is utilized immediately upon release from the institution, special needs may also be recognized. With accurate recognition, the aftercare counselor could make efficient use of community resources. He could adapt and apply an appropriate level of qualitative supervision casework service for the youth and his family. The aftercare counselor could also offer meaningful assistance to others involved with the family such as teachers, social workers, public health personnel, etc.
To summarize, a prediction device should be carefully constructed. Adequate knowledge of those to whom it is to be applied must be available. The device can be utilized by school staff or aftercare counselors to take action in areas of deficient social and personal circumstances. In so doing, it is hoped that propensity for eventual failure in community adjustment can be reduced. Aside from its practical utilization within the treatment program, the device provides the worker a source for collection and retention of valuable case information.
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APPENDIX I

HYPOTHESIS

Statistically significant differences in personal and social characteristics identify those juveniles who fail on Aftercare, and those juveniles who succeed on Aftercare in the State of Montana after they are released from Pine Hills School.

These characteristics are:

1. MARITAL STATUS OF PARENTS TO EACH OTHER*
2. EMPLOYMENT STATUS OF FATHER
3. FREQUENCY OF MINOR'S DISCUSSION OF PERSONAL PROBLEMS WITH MOTHER
4. MINOR'S ATTITUDE TOWARD SCHOOL*
5. SELF-RESPECT OF FAMILY*
6. EMOTIONAL TIES OF MOTHER TO THE MINOR
7. EMOTIONAL TIES OF FATHER TO THE MINOR
8. FATHER'S DISCIPLINE OF MINOR
9. MOTHER'S SUPERVISION OF THE MINOR*
10. FATHER'S SUPERVISION OF THE MINOR*
11. COHESIVENESS OF FAMILY
12. RATING OF HOME FOR MINOR'S RETURN*
13. AGE AT FIRST ADMISSION (to Pine Hills School)
14. COMMITMENT OFFENSE

*Significant at .05 level in IHVRS.
MENTAL RATING

PRIOR RECORD

LENGTH OF TIME INCARCERATED ON FIRST COMMITMENT
APPENDIX II A

INITIAL HOME VISIT RESEARCH SCHEDULE

(1-5) Y.A. Number__________________(6-7) Date__________________

Ward's Name______________________(8) Sex: M_______ F_______

(9) Relationship of interviewee to ward__________________________

--- HOME AND FAMILY ---

(10) Number of rooms in the house (excluding bath & kitchen)

1____  4____
2____  5____
3____  6____

(11) Amount of rent or house payment per month.

Renting____  Own____
Buying____  Provided by employer____

(12) Less than $40_____  $80-99_____

$40-59_________  $100-119_____  
$60-79__________  $120 plus_____

(13) Length of time the family has resided at current address
(to nearest year).

0____  3 or 4 ______
1____  5,6, or 7_____
2____  1 plus______

(14) Number of moves(changes of address) the family has made
since ward's birth.

None or 1 _____  8 - 10 ______
2 - 4 _________  11 - 14 ______
5 - 7 __________  15 plus ______

(15) Total number of people (including ward) in the home.

1 - 2 _____  7 - 8_____  
3 - 4 _______  9 - 10_____
5 - 6 _____  11 plus____
(16) Marital status of natural parents to each other.
Not married______ Broken by death_______
Divorced_______ Unbroken discordant_______
Separated_______ Unbroken congenial_______

(17) Parental configuration of the ward’s family.
Natural mother and natural father_______
Natural mother and father substitute_______
Natural mother and no father or substitute_______
Natural father and mother substitute_______
Natural father and no mother or substitute_______
Other relatives_______
Adoptive parents_______
Foster parents_______

(18) Employment status of parent figures.
Mother (or substitute):
Unemployed_______ Seasonal_______
Part time_______ Full time_______
Intermittent_______ Mother absent_______

(19) Employment status of parent figures:
Father (or substitute):
Unemployed_______ Seasonal_______
Part time_______ Full time_______
Intermittent_______ Mother absent_______

-- WARD --

(20) Average number of hours per week spent by ward performing regular tasks around the home (kitchen duties, house cleaning, yard work, farm chores).
None_______ 9-12_______
1-4_______ 13-16_______
5-8_______ 17 plus_______

(21) Correspondence of time indicated in the preceding item with time requested by parent(s).
Much less than requested_______
Less than requested_______
As requested_______
More than requested_______
Much more than requested_______
(22) Average number of evenings per week spent by the ward outside the home.

None_______ 3__________
1_________ 4_________
2_________ 5 or more______

(23) Age of ward's best friends in relation to ward's age.

Mostly older________
Mostly same age______
Mostly younger________
Varied ages___________
No friends______________

(24) Frequency of ward's recreation involving him with parent figures. (Games, outings, movies, sports, etc.—T.V. and conversation not included.)

Mother (or substitute):

Never _________ Often_________
Occasionally____ Mother absent___

(25) Father (or substitute):

Never _________ Often_________
Occasionally____ Father absent___

(26) Frequency of ward's discussion of personal problems with parent figures.

Mother (or substitute):

Never _________ Often_________
Occasionally____ Mother absent___

(27) Father (or substitute):

Never _________ Often_________
Occasionally____ Father absent___

(28) Number of households, excluding foster-home placements, of which ward has been a member (i.e., living with relatives).

1_______ 4__________
2_______ 5_________
3_______ 6 or more______

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(29) Number of foster-home placements of the ward.

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(30) Age at which ward's home ties were first broken (living away from home—this includes foster-home placement).

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<th>9 - 14</th>
<th>15 plus</th>
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(31) Ward's current attitude toward school (according to parents).

- Readily accepts
- Indifferent
- Markedly dislikes

(32) Age at which truancy began.

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<tr>
<td>9 or 10</td>
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(33) Age at which serious or persistent school misbehavior began (excluding truancy).

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<td>8 or younger</td>
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<tr>
<td>9 or 10</td>
<td></td>
<td></td>
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</tbody>
</table>

(34) Frequency of ward's church attendance during the past two years.

- Never
- Occasionally
- Often

(35) Has excessive drinking by the ward been a problem?

- Yes
- No

(36) Has the ward ever been the subject of psychiatric or psychological observation, evaluation, or therapy resulting from definite or suspected psychological disorder (this excludes routine "workups").

- Yes
- No
Developmental behavior persistently exhibited:

- Nail biting
- Thumb sucking
- Temper tantrums
- Bedwetting
- Nightmares
- Extended serious illness

Family members who have a record of criminality or delinquency:

- Siblings
- Mother (or substitute)
- Father (or substitute)
- Other

Number of partners in current offense:

- None
- 1 or 2
- 3 or 4
- 5 or 6
- 7 or 8
- 9 or more

Court of ward's commitment for current offense:

- Juvenile
- Adult

Impressions:

-self-respect of the family:
  - None
  - Slight
  - Marked

-emotional ties of parents to the ward:
  - Mother (or substitute):
    - Excessive
    - Warm
    - Infidderent
    - Covertly rejecting or hostile
    - Overtly rejecting or hostile
    - Mother absent
(51) Emotional ties of parents to the ward.

Father (or substitute):

- Excessive
- Warm
- Indifferent

Covertly rejecting or hostile
Overtly rejecting or hostile
Father absent

(52) Parents' discipline of the ward.

Mother (or substitute):

- Lax
- Inconsistent
- Firm but kindly

Overly strict
Mother absent

(53) Parents' discipline of the ward.

Father (or substitute):

- Lax
- Inconsistent
- Firm but kindly

Overly strict
Father absent

(54) Parent's supervision of the ward (knowledge of the ward's activities and whereabouts by parent figures or responsible delegates).

Mother (or substitute):

- Insufficient supervision
- Adequate supervision
- Excessive supervision

Mother absent

(55) Parent's supervision of the ward (knowledge of the ward's activities and whereabouts by parent figures or responsible delegates).

Father (or substitute):

- Insufficient supervision
- Adequate supervision
- Excessive supervision

Father absent
(56) Cohesiveness of family (common interests, mutual respect and affection, a general "we" feeling).

Very little cohesiveness
Average cohesiveness
Extreme cohesiveness

(57) Rating of home for ward's return (regardless of whether an alternative placement is available).

Undesirable
Acceptable
Excellent

Completed by:_________________  Approved by:_________________
Parole Officer  Supervisor
APPENDIX II B
# APPENDIX II B

## SCHEDULE FOR PRESENT STUDY

### PART A

1. Status
2. Name
3. Case No.
4. Race (Negro, Mexican, Indian, Caucasian, Oriental)
5. Birthdate
6. County of First Commitment
7. Date of First Commitment
8. County of First Recommitment
9. Date of First Recommitment
10. Date of First Release
11. Offense for First Commitment
12. Offense for First Recommitment
13. Frequency of Contact With Minor
14. Average Length of Interview
15. Frequency of Contact With Parent
16. Average Length of Interview

### PART B

1. Marital status of natural parents to each other:
   - not married
   - divorced or separated
   - broken by death
   - unbroken discordant
   - unbroken congenial

2. Employment status of father (or substitute):
   - unemployed
   - part time
   - intermittent
   - seasonal
   - full time
   - father absent

3. Frequency of minor’s discussion of personal problems with mother (or substitute):
   - never
   - occasionally
   - often
   - mother absent

4. Minor’s attitude towards school:
   - readily accepts
   - accepts
   - indifferent
   - dislikes
   - markedly dislikes
5. Self-respect of family:
   _____none
   _____slight
   _____Marked

6. Emotional ties of mother (or substitute) to the minor:
   _____excessive
   _____warm
   _____indifferent
   ____covertly rejecting or hostile
   ____overtly rejecting or hostile
   ____mother absent

7. Emotional ties of father (or substitute) to the minor:
   _____excessive
   _____warm
   _____indifferent
   ____covertly rejecting or hostile
   ____overtly rejecting or hostile
   ____father absent

8. Father's discipline of minor (or male substitute):
   _____lax
   _____inconsistent
   _____firm but kindly
   ____overly strict
   ____father absent

9. Parent's supervision of the minor (knowledge of minor's activities and whereabouts by parent figures or responsible delegates):

   Mother (or substitute):
   _____insufficient supervision
   _____adequate supervision
   ____excessive supervision
   ____mother absent

   Father (or substitute):
   _____insufficient supervision
   _____adequate supervision
   ____excessive supervision
   ____father absent

10. Cohesiveness of family (common interests, mutual respect and affection, a general "we" feeling):
    _____little cohesiveness
    _____average cohesiveness
    ____extreme cohesiveness
11. Rating of home for minor’s return (regardless of whether an alternate placement is available):

- undesirable
- acceptable
- excellent

12. Age at first admission (at last birthday):

- 8 - 12
- 13
- 14
- 15
- 16
- 17

13. Commitment offense (use Montana code):

14. Mental rating:

- superior
- high average
- normal
- dull
- normal
- borderline

15. Prior record (prior to first commitment):

- none
- 1 or delinquent contacts
- 3 through 5 delinquent contacts
- 6 or more delinquent contacts.
APPENDIX III

IHVRS ITEMS SIGNIFICANT AT .05 LEVEL

HOUSING
TIME AT CURRENT ADDRESS
MOVES SINCE BIRTH
MARITAL STATUS OF NATURAL PARENTS
PARENTAL CONFIGURATION OF FAMILY
HOURS PER WEEK WORKING AROUND HOME
CORRESPONDENCE OF ABOVE WITH PARENTS' REQUEST
EVENINGS PER WEEK OUTSIDE THE HOME
NUMBER OF HOUSEHOLDS OF WHICH A MEMBER
NUMBER OF FOSTER-HOME PLACEMENTS
AGE AT WHICH HOME TIES FIRST BROKEN
CURRENT ATTITUDE TOWARD SCHOOL
AGE AT WHICH TRUANCY BEGAN
BEGINNING OF SCHOOL MISBEHAVIOR
EXCESSIVE DRINKING
PSYCHIATRIC OBSERVATION, EVALUATION OR TREATMENT
PERSISTENTLY EXHIBITED NAIL-BITING
PERSISTENTLY EXHIBITED TEMPER
PERSISTENTLY EXHIBITED BED-WETTING
CRIMINAL OR DELINQUENT RECORD: FATHER
CRIMINAL OR DELINQUENT RECORD: OTHER FAMILY MEMBERS
COURT OF COMMITMENT
NUMBER OF PARTNERS IN CURRENT OFFENSE
SELF-RESPECT OF FAMILY
MOTHER'S SUPERVISION OF WARD
APPENDIX IV
APPENDIX IV

REVISED SCHEDULE

MARITAL STATUS OF PARENTS
- not married
- divorced or separated
- broken by death
- unbroken discordant
- unbroken congenial

EMPLOYMENT STATUS OF FATHER
- part time
- intermittent
- full time
- father absent

FREQUENCY OF DISCUSSION OF PROBLEMS WITH MOTHER
- never
- occasionally
- often

ATTITUDE TOWARD SCHOOL
- readily accepts
- accepts
- indifferent
- dislikes
- markedly dislikes

SELF RESPECT OF FAMILY
- none
- slight
- marked

EMOTIONAL TIES OF MOTHER
- excessive
- warm
- indifferent or hostile
- mother absent

EMOTIONAL TIES OF FATHER
- excessive
- warm
- indifferent or hostile
- father absent

FATHER'S DISCIPLINE OF MINOR
- lax
- inconsistent
- firm
- father absent
<table>
<thead>
<tr>
<th>MOTHER'S SUPERVISION OF MINOR</th>
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<tbody>
<tr>
<td>inadequate</td>
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<tr>
<td>adequate</td>
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<tr>
<td>mother absent</td>
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<table>
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<th>FATHER'S SUPERVISION OF MINOR</th>
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<tr>
<td>adequate</td>
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<tr>
<td>father absent</td>
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<table>
<thead>
<tr>
<th>COHESIVENESS OF FAMILY</th>
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<tr>
<td>cohesive</td>
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<tr>
<th>RATING OF HOME FOR MINOR'S RETURN</th>
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<tbody>
<tr>
<td>undesirable</td>
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<tr>
<td>desirable</td>
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<tr>
<th>AGE AT FIRST COMMITMENT</th>
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<tr>
<td>10-12</td>
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<tr>
<td>13</td>
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<tr>
<td>14</td>
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<td>15</td>
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<table>
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<th>NATURE OF OFFENSE</th>
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<tbody>
<tr>
<td>delinquent</td>
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<td>pre-delinquent</td>
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<th>MENTAL RATING</th>
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<tr>
<td>high average</td>
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<tr>
<td>normal</td>
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<td>dull normal</td>
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<table>
<thead>
<tr>
<th>PRIOR DELINQUENT CONTACTS</th>
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<tbody>
<tr>
<td>1 or 2</td>
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<td>3 through 5</td>
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<td>6 or more</td>
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| LENGTH OF TIME INCARCERATED FOR FIRST COMMITMENT |