The Use of Offender Background Variables as an Aid in Selecting Offenders for Prison Work and Training Programs

---

A Thesis

Presented to

the Faculty of the Department of Psychology

Appalachian State University

In Partial Fulfillment

of the Requirement for the Degree

Master of Arts

By

John Bartow Black

April 11, 1977

The Use of Offender Background Variables as an Aid in Selecting Offenders for Prison Work and Training Programs

John Bartow Black

Approved by:

William H. Knight
Chairman, Thesis Committee

James R. Deni
Professor of Psychology

Frank R. Terrant Jr
Associate Professor of Psychology

Joyce G. Crouch
Chairperson, Department of Psychology

Richard H. Kupp
Dean of Graduate School

Sincere appreciation is expressed to Dr. Leonard Berger, Dr. William H. Knight, Dr. Frank R. Terrant, Jr., Dr. James R. Deni and Charles Miliam. Their assistance made this study possible.

Abstract

Prison programs are often administered without concentrated effort to maximize successful outcomes. This study attempts to contribute to successful outcomes by developing a scheme for the selection of offenders into three prison programs. The background factors of 142 male subjects were analyzed to find the factors which could be used to increase the predictability of success, as measured by recidivism and employment level, for three treatment programs (working on high school equivalency diploma, a carpentry and welding course and details). A variety of demographic, social, vocational and psychometric factors were used. Correlations were obtained for each background factor and the success criteria of arrest and employment level. A regression analysis was conducted for each treatment program. Significant predictors for the graduate equivalency diploma group were cocaine use ($p < .05$) and being a veteran ($p < .05$). Re-arrest was more likely for cocaine users and non-veterans. Predictors for the carpentry and welding program were race ($p < .01$) and vocational choice ($p < .01$). Re-arrest was more likely for non-whites and for offenders with lower vocational choice levels. Predictors for the detail program were violation of person offenses ($p < .01$), number of siblings ($p < .01$), race ($p < .01$), the amount Vocational Rehabilitation spends ($p < .01$) and the Revised Beta score ($p < .01$). Re-arrest was more likely for offenders who committed violation of

person crimes, offenders with more siblings, non-white offenders, offenders for which Vocational Rehabilitation spent more money and offenders with lower Revised Beta scores. Results suggest that these factors do vary for each program and factors can be found which aid in the prediction of success.

The Use of Offender Background Variables as an Aid in Selecting Offenders for Prison Work and Training Programs

Prison treatment programs are often integrated into prison life with anticipated positive results, but with little forethought of how to maximize these results. Treatment success is affected by factors such as prison characteristics, program administration, economic conditions and offender characteristics. The ability to control and influence the prisoner's outcome vary for each of these factors. This study takes the factors of offender characteristics and attempts to find which factors correlate highly with successful outcome and can consequently be used to predict the success of prisoners in each program.

Studies concerning program success do not yield the maximum accurate or beneficial results unless some information is known concerning the most effective operation of that program. A program may yield insignificant results, but actually be operating at a fraction of its potential. An accurate picture of the program's success would, of necessity, involve a clear understanding of the potentials of this program. By analyzing offender characteristics, this study shall aid in approaching the optimum success level for this program and provide generalizations which may be applicable to related studies.

Since the beginning of the field of corrections, research ef-

forts have been directed at the differences and similarities of offenders and methods of classifying these differences and similarities. The basic aims of these studies have been to develop techniques for the prevention and treatment of crime. A central idea which all of these studies have been based upon is a theory of the causation of crime. Theories such as Sutherland's Differential Association (1966), Taft's Cultural Crimogenisis Theory (1966), Reckless's Containment Theory (1967), Cohen's Theory of Subcultures (1955), psychiatric theories and physiological theories have all been based upon criminal similarities in causation. They have found that generalizations can be made about offenders and offenders can be classified and decisions made about treatment programs. These thories have not concluded that they have the only answer, but that they have a certain amount of validity when applied to some segment of the offender population.

It would seem logical to conclude that if offenders may vary concerning their characteristics and causations then, there would also be an effect on the success of treatment and recidivism depending upon these same factors. Mueller (1960) conducted a study which suggested this relationship. In this study, delinquents had three basic treatments: (1) release to direct parole in the community, (2) forestry camp and (3) training school. Mueller found differential effects of these treatments with varying kinds of delinquents.

Other authors such as McCord, McCord and Zola (1959) and Gibbons (1965) have suggested varying treatments for offenders with specific characteristics. The former study suggests six offense types. The latter study suggests differential therapeutic methods for various subtypes defined by social role. These studies and several others have suggested that individual characteristics can affect treatment outcomes and could be used to increase treatment effectiveness. Warren (1971) concluded that, "The goals of correctional treatment with any offender should relate in some direct manner to the causes or meaning of the law violation and the treatment method should relate specifically with these goals" (p. 255). Warren thus relates the fact that individual factors relate to treatments and goals. This is the central theme which suggests the present study.

Some recent research has had direct relevance to this present study. A follow-up study of rehabilitation clients by the University of Minnesota (1969) found that clients who were rehabilitated had a greater percentage of professional, technical and managerial occupations with fewer service occupations. They further found that during their four-year follow-up, 75% of the clients had two jobs or less. This is related closely to the present study's follow-up on employment level and number of jobs held. If individual factors or characteristics are expected to

influence some treatment programs, then they could also have an influence on the recidivism and success of similar treatment programs.

Glueck and Glueck (1968) sought to find the variables which distinguished juvenile delinquents from non-juvenile delinquents. They found the variables of the nature of employment of the delinquent's father, whether living with parents, the usual economic condition, the usual occupation of the father, size of the family, reading quotient, vocational ambitions and intelligence to differ between delinquents and non-delinquents. The fact that these factors distinguish delinquents from non-delinquents suggest that they may also affect the results of treatment programs.

Warren (1971) has stated, "by lumping together all subjects, the beneficial effects of a treatment program on some subjects, together with the detrimental effects of the same treatment program on other subjects may each mask and cancel out the other... not only is it possible to find similar ties in the descriptions of offender characteristics across typologies, but also that consistency is evident in descriptions for seemingly similar subtypes" (pp. 245, 255). If the significant variables which affect treatment success can be found, then they may be used for selection and placement in treatment programs which shall produce optimum success.

An additional study, which is closely related to the present study, was conducted by Gottfredson and Lipstein (1975). They used personal characteristics to predict parolee and probationer employment stability. Significant correlations were found between stability and occupational consistency, job skill, socialization, prior job tenure, incarcerations, auto theft and a base expectancy measure. These results suggest the importance of vocational skills and consistency in promoting employment stability.

Other studies have concerned themselves with the success of work and education programs. The United States Bureau of prisons, Research and Statistical Branch (1962) found that, "the intervention of work experience or vocational training has negligible impact on the level or type of work inmates go into upon release" (p. 13). Glaser (1964) interviewed paroled offenders in an effort to find whether their prison work or training had been useful in their job. He found that four months after release from prison, approximately one-fourth of the offenders used their prison work experience on their jobs. He also found that for the minority of offenders who gain skills in prison which they use on a job after their release, the prison work experience and training is a major rehabilitation influence. These studies suggest the need for further clarification of the effects of work experience and training in the prison system.

In summary, it has been suggested that offender treatment

should be related to offender characteristics. It has also been found that previous studies have been conflicting concerning the actual effect of prison work experience and training.

Purpose. With regard to these findings, this study shall analyze the effects of three prison treatment programs: working on high school equivalency diploma, a carpentry or welding course, and detail work. The results of this training will be compared with recidivism and employment level. Background factors such as education, occupation, father's occupation, rank of birth, etc., psychological factors and intelligence test scores shall be analyzed to determine the significant factors for predicting success of treatment programs. It is expected that treatment groups will have an effect on the employment level and arrest rate after release. It is also anticipated that certain background factors shall aid in the prediction of success as measured by employment level and recidivism. It is further hypothesized that prisoner group preference is an aid in the predictive value for success, compared with background variables alone and together these variables can be used to develop a decision scheme which shall maximize the effects of training on success.

Method

Subject. The subjects used in this study have been in one of three treatment programs at a cottage type youthful offenders facility in a large Northwestern South Carolina county. The

majority of these offenders had originally been in a larger state-wide facility from which they were transferred to the cottage facility which is generally within fifty miles of the offender's home town. The offenders at the cottage facility are male and 16-25 years old. These offenders are assigned to treatment programs at their own discretion. From this area facility, these offenders are transferred to a pre-release center or a work-release program. The sample is restricted in two ways. The offenders were not randomly assigned to treatment groups, but were assigned by offender preference. The sample was also restricted to offenders who receive the aid of the State Vocational Rehabilitation agency upon their release. In order to receive Vocational Rehabilitation aid, an offender must have had a psychological examination. Approximately 90% of the offenders have obtained this examination and they are selected randomly. An estimated 75% of the offenders in this facility later contacted the Vocational Rehabilitation agency in his home town and were referred to the appropriate area counselor. The Vocational Rehabilitation agency provides guidance and counseling, a possible two-week maintenance check, and may aid the offender in buying work clothes and specific tools for work, depending upon the offender's needs as assessed by the rehabilitation counselor.

Apparatus. The major sources of information for this study were records of the prison facilities, Vocational Rehabilitation

interview records and parole officer reports. One major source of information was an initial interview - report gathered from psychological examinations administered in prison and at the pre-release center. These examinations were conducted by state licensed psychologists and included several of the following tests: Otis - Lennon Mental Abilities Test; Wide Range Achievement Test in Reading, Spelling, and Arithmetic; Minnesota Multiphasic Personality Test; Revised Beta; and the Wechsler Adult Intelligence Scale. Table 1 includes a complete list of the tests administered and the background information obtained. This information was stored in folders for each offender at the area Vocational Rehabilitation office and remained on file for five years after release.

Design. Three offender groups entered separate training programs at offender preference. Correlations were obtained for each background characteristic and the success measures of recidivism and employment level a year after release. A multiple regression analysis was conducted for all the background characteristics to obtain the predictors of success for each training program. This was done in a step-wise manner resulting in an accumulative R^2. The process continued with each background variable until a $p < .10$ level of significance was obtained. The best predictors of each program were then selected and a decision scheme was developed for the prediction of arrest. In order to

test this scheme, a discriminant analysis was conducted using the better predictors for arrest and employment level. A chi-square analysis was conducted to test the significance of the effect of treatment program on success. One hundred and forty-two offenders were used in this study. From the 142 subjects, the follow-up information was obtained for 107. For the regression analysis which used arrest as the success criterion, 76 of the original 107 offenders had sufficient background information for analysis. The number of offenders included in other analyses varied for each, depending upon the number of offenders who had complete information for all background factors.

Procedure. Prisoners at a youthful offenders institution in a large Northwestern South Carolina county enter into one of three possible work programs at the offender's discretion. The three programs are: working on high school diploma and work details, working on a carpentry and welding program and work details and only working on details. Offenders typically stay at the youthful offenders institution for a minimum of three months to a maximum of one year. Offenders are then sent to a pre-release program or serve the remainder of their sentence on a work-release program. At the youthful offenders institution and the pre-release center a Vocational Rehabilitation counselor discusses their services and encourages the offender's participation in Vocational Rehabilitation after release from prison. Clients voluntarily contact the

Vocational Rehabilitation Department after release and an interview with the counselor is scheduled to obtain necessary background information and establish potential goals and the procedures to attain these vocational goals. Vocational Rehabilitation services may consist of counseling and guidance, a medical examination, financial aid with a medical problem, a maintenance check for two weeks after release and financial aid for buying work clothes and tools. The services obtained by each offender are dependent upon individual needs and requirements as assessed by the Vocational Rehabilitation counselor. The information for this study was gathered from the Vocational Rehabilitation counselor's interviews and files. These files consist of numerous psychological tests and background information obtained from the offender while he was serving his prison sentence. These tests are administered by licensed psychologists and are sent to the Vocational Rehabilitation counselor in the county to which the offender will return after his release. The Vocational Rehabilitation Department retains the test data of each offender for five years after release. Each area office has the information of only those offenders to be released in that particular area. A variety of demographic, social, vocational and psychometric factors were obtained for each offender. Table 1 contains a complete list of these factors with their explanation. Yearly follow-ups were conducted with the aid of the Vocational Rehabilitation Department and the Probation and Parole

office. These follow-ups provided information concerning any further arrests and the employment at the time of the follow-up. Follow-up information was obtained by personal contact and telephone conversations by the Rehabilitation counselor. The date of any re-arrest and the initial release from prison were obtained to find the length of time the offender remained out of prison before any re-arrest occurred. The only re-arrests coded were those that occurred within one year of the release from prison. Employment level was classified by the amount of training required for a job. These classifications were: unemployed; unskilled, no training required; semi-skilled, one month to one year of training; skilled, one to two years of on-the-job training; paraprofessional, two years training at a technical school; professional, four years training or more. Correlations and analyses were then conducted to determine the better predictors of these follow-ups.

Results

Table 2 gives the means and standard deviations for each background factor.

Table 3 indicates the number re-arrested and the percentage of offenders in each treatment program. This table indicates that the carpentry and welding program has the largest percentage of offenders and the GED program has the fewest offenders. This table suggests that the GED program members and the carpentry

and welding program members have a slightly lower re-arrest rate than would be expected by chance alone. The results suggest that the detail program members have a slightly higher re-arrest rate than would be expected by chance alone.

Table 4 indicates the employment level and percentages of offenders in each level for the three treatment programs, six months after release. Generalizations are difficult to surmise from this table, but trends are suggested. The GED program is lower in unemployed members, but higher in the semi-skilled level. The carpentry and welding program has more unemployed offenders, but also has more skilled members than would be expected by chance. The detail program has more unskilled members and fewer members in the skilled employment level. Slightly over half of the offenders, in all programs combined, were in the semi-skilled employment level, 22% were employed in skilled jobs, 16% were in unskilled jobs and 10% were unemployed.

A chi-square analysis was conducted to determine the effect of program choice and recidivism. It was concluded that recidivism within a year after release was not affected by program choice, $\chi^2 = 1.856$, 4^{df}. This indicates that the programs are equally successful and as currently administered, there is not any significant difference between the program choice and recidivism. These results suggest that the small

differences in recidivism found in Table 2 are not sufficiently large enough to be significant.

Correlations were obtained for the background variables of each rehabilitation program and re-arrest. A step-wise regression was then conducted selecting the better predictors for each program. All but one of these selected variables were significant to the .10 level. The correlations were combined for each program to obtain an accumulative R square. Regression weights were obtained for each variable and a regression equation was developed for the prediction of recidivism.

Table 5 presents the background variables which had higher correlations with re-arrest for each rehabilitation program, the accumulative R squares and the regression weights. The background factors were found to generally vary for each treatment program although some common factors were found. The better predictors for the GED program were: being a veteran ($p < .05$), cocaine use ($p < .05$), pot use ($p < .08$) and father's occupation ($p < .14$). The significant variables for carpentry and welding were vocational choice ($p < .01$) and race ($p < .01$). The significant success predicting variables for the detail program were Revised Beta ($p < .01$), amount Vocational Rehabilitation spends ($p < .01$), race ($p < .01$), number of siblings ($p < .01$) and violation of person offense ($p < .01$). These regression analyses were conducted using 76 of the total 142 in the

population. This was necessitated by an inability to locate offenders for the follow-up or insufficient data on the offender. After the data was gathered, several of the test scores were not included as variables due to insufficient numbers for analysis. These tests were the Otis - Lennon Mental Abilities Test, Minnesota Multiphasic Personality Test and The Wechsler Adult Intelligence Scale.

Correlations and a step-wise regression were conducted for all programs combined with arrest as the success criterion. Table 6 reveals the results of this analysis. The major significant variables were race ($p < .01$), prior arrest ($p < .01$), birth rank ($p < .01$) and violation of person offense ($p < .01$). Table 7 indicates the significant variables which correlate with employment level as success for all programs combined. It was found that salary ($p < .01$), reading level ($p < .01$), amount Vocational Rehabilitation spends ($p < .01$), homicide crime ($p < .01$), marital status ($p < .01$), Revised Beta ($p < .01$), alcohol use ($p < .01$) and violation of property offense ($p < .01$) were significant for prediction of employment level. These results indicate that varying background factors are significant for prediction of success depending upon the success criterion chosen. For this reason, the selection of the success criterion is a prominent factor in the development of a decision scheme using background factors to aid rehabilitation programs.

In order to test the use of the preceding variables in aiding the selection of offenders for the three rehabilitation programs, a discriminant analysis was conducted for all programs combined using recidivism as the success criterion. Table 8 summarizes the results of this analysis. Fifty-five subjects were used due to a lack of complete information for the remaining offenders. The decision scheme correctly classified recidivism for 54 of the 55 offenders. From all of the variables used, nine were selected as the better predictors of arrest. These variables were race, education, marital status, occupation, father's occupation, birth rank, maximum salary and Revised Beta score. Table 9 summarizes the results when these nine variables were used with their regression weights in a regression equation to predict recidivism. Eighty-three offenders had complete information for this analysis and 61 were correctly classified.

Further discriminant analyses were conducted to determine if the offender's program selection could also aid in the classification of recidivism and employment. These analyses consisted of 107 offenders whose programs in prison were known and for which follow-up information was obtained a year later. Of these 107 offenders, correct classification was made for 68 offenders for recidivism and 21 were correctly classified with employment level as success. This suggests that offender program selection

has a minimal influence on the classification of arrest and employment level.

An additional discriminant analysis was conducted to test the effectiveness of using all the background factors for classifying the offender's program selection. Information for the background factors and offenders program selection were obtained for 76 offenders and 58 of these offenders were correctly classified into the program they actually chose. Of these variables, nine were selected (race, education, marital status, occupation, father's occupation, birth rank, salary maximum and Revised Beta score) and a discriminant analysis was obtained correctly classifying 56 of 110 offenders. Table 10 summarizes these results. These results suggest that using offender background factors, the offender's program selection can be estimated with greater accuracy than chance alone.

General conclusions suggest that as currently used, the type of treatment chosen does not have any significant difference for recidivism. It was found that some background factors did significantly aid in the classification of success and these predictors did vary for each treatment group. Results further indicate that using background variables, the prisoner preference of treatment program can be predicted better than chance. Using the program selected by the offender as an aid to classification of arrest resulted in a slight increase in

the accuracy of classification, but these results were non-significant. The use of the program selected to classify the employment level yielded similar non-significant results.

Discussion

Several of the findings agree with previous studies which suggest commonalities among offenders and using these commonalities to influence treatment decisions. The results are in particular agreement with McCord, McCord and Zola (1959), Gibbons (1965) and Gottfredson and Lipstein (1975) suggesting that varying treatments be given offenders with specific characteristics. This study found varying background factors do aid in the classification of arrest for different treatment programs. These factors are congruent with the variables found by Glueck and Glueck (1968) which distinguished juvenile from non-juvenile offenders.

The results of this study indicate that the three treatment programs had no differential relationship to success. One possible explanation could be that the programs do differ in success, but they are not functioning at their optimum level. The present study may therefore assist in finding these optimum levels. These job programs are admirable and potentially advantageous, but only with further analysis and effort can they obtain their maximum desired results.

The results of this study indicate that the graduate

equivalency diploma program members have fewer arrests when their father's occupational level is higher, they have less stated pot use, they have less stated cocaine use and are veterans. Fewer arrests occur for the members in carpentry and welding when they are white and have higher stated vocational choice levels. Members of the detail program had fewer re-arrests if they had not committed violations of person, had fewer siblings, were white, Vocational Rehabilitation spent less for them and Revised Beta scores are higher. These variables can aid selection of offenders for programs if they are considered along with offender's preference. Offenders who are unsure of their program choice or who would prefer any program, may have a greater chance for success in one program than another if these programs are operating closer to their optimum level. These variables would be good indicators of the better choice. Each offender should have a program for which he has a maximum chance for success. An offender may have negative background factors for all but one of the significant background variables, despite this lack of positive indicators, this would be a better decision-making method than random chance alone. Ideally, it would probably be good to use this decision scheme exclusively once the variables have been conclusively identified and correlated. Presently, they serve as good indicators and considered with the offender's stated program choice

can benefit program decisions.

The use of these variables in a decision scheme should not be limited to prediction of arrest in general, but they should also be used for specific program prediction. In order to be a significant benefit to training decisions, influencing factors must vary for each treatment program. If all factors affected the programs equally then the factors would also be those that influence any rehabilitation effort and could help in deciding who could be rehabilitated, but the type of institutional program would no longer be a relevant variable. This condition would particularly need to apply to the present study. To conform to this requirement, the present study would have to indicate that the variables for prediction of success are significantly different. The results of this study confirmed this condition, thus suggesting the applicability of the background factors as predictors of success for the separate programs.

One major aim of this study was to have practical significance, something that would actually benefit the treatment goals. In order to obtain this, it was necessary to work in the natural setting and not in an artificial experimental setting where manipulation would be more accessable. This, of course, presented numerous difficulties in conducting this study, but this was important in order to obtain applicable results. Statistically significant results were obtained for

many of the variables and others had low p values. It is clearer and of course more reliable to work only with statistically significant data, but trends and indications can be gathered from all results and be used to benefit decision making policies despite their lack of statistical significance. The use of statistical significance serves to reduce errors. The statistical level used depends upon the type of error which is considered the less desirable. The decision for significance depends on the consequences of the errors in the decision process. The present study contrasts a decision scheme with a decision process which is basically done by chance. The occurrence of misclassified offenders is undesirable, but if the use of non-significant data provides greater accuracy at the cost of a few misclassified offenders than the benefits have surmounted the negative consequences. The graduate equivalency diploma program in this study had several variables which were not significant, but their use could aid in accuracy compared to using the present decision method. The inclusion of these variables may also allow them to be tested in future studies where varying populations and circumstances can substantiate or abjure their influence upon success.

The use of a large number of correlations, as occurs in this study, results in the possibility of Type I errors. By

chance alone, misclassifying some relationships as being significantly different when no actual differences exist will occur. One method of reducing this is to select a higher significant level. This will tend to increase the Type II errors which is stating that a variable is not significant when actually it is significant. One possible solution to the quandary would be a cross-validation study which would solidify the accuracy of these variables for the classification of arrest. This would provide greater confidence and applicability of these variables in the decision-making process.

The use of the regression analysis in this study involves two possible risks which need to be considered. The first concerns the applicability of these results to other groups. Regression weights for other groups will vary to some extent depending particularly upon their background characteristics. The application of these results with other groups will rely upon further studies relating the use of these variables to varying populations. An additional consideration for this analysis is that a regression analysis is designed specifically for use in linear relations. The regression analysis assumes a linear relation to exist and other types of relationships can distort the results.

A major problem created by the circumstances of this study was the limitation on the total number included in the

study. One hundred and forty-two records were available during the past five years. Using the arrest and employment level as the success criterion, seventy-six offenders were used from the original one hundred and forty-two. Varying numbers were used for other analyses depending upon the number of offenders who had complete information for that particular analysis. The major reason for this loss of subjects was an inability to locate the offenders once they left prison. This is a major aspect which should be considered when selecting a sample in further studies. After this number of subjects was divided into the three programs, there was a less than ideal number of subjects to indicate conclusive information concerning the exact order of prediction variables for each group. This study does provide general information concerning placement of offenders and provides sufficient information to conclude that significant variables do exist which will aid in the prediction of success and these variables increase the chance of positive effects on training. To alleviate this problem, future studies should have a larger sample in order to allow for this loss of subjects. This would increase the significance and accuracy of the predictive factors.

This study makes no attempt to establish a cause and effect relationship or to claim to have included all of the factors for success. It does attempt to explore a certain

segment of the variables which can aid program decisions while waiting for future studies to identify and accumulate other factors which shall help in obtaining a more accurate estimation of the program's potential and value as a rehabilitation process.

References

Cohen, A. F. Delinquent boys: the culture of the gang. New York: The Free Press, 1955.

The financial and employment resources of persons released from federal institutions. U. S. Bureau of Prisons, Research and Statistic Branch, 1962, 13.

A follow-up survey of former clients of the Minnesota division of vocational rehabilitation. University of Minnesota, 1969.

Gibbons, D. Changing the lawbreaker. Englewood Cliffs, New Jersey: Prentice Hall Inc., 1965.

Glaser, D. The effectiveness of a prison and parole system. Indianapolis: Boggs - Merrill Inc., 1964.

Glueck, S. and Glueck, E. Unraveling juvenile delinquency. Cambridge, Massachusetts: Harvard University Press, 1968.

Gottfredson, G. D. and Lipstein, D. J. Using personal characteristics to predict parolee and probation on employment stability. Journal of Applied Psychology, 1975, 60; 644 - 648.

McCord, W., McCord, J. and Zola, I. Origins of crime. Cambridge, Massachusetts: Harvard University Press, 1959.

Mueller, J. R. Success rates as a function of treatment assignment and juvenile delinquency classification interaction. California State Board of Corrections Monograph, 1960.

Reckless, W. C. The crime problem. New York: Appleton Century Crofts, 1967.

Southerland, E. H. and Cressey, D. R. Principles of criminology. Philadelphia: Lippencott, 1966.

Taft, R. C. Influence of the general culture on crime. Federal probation, 1966, 30; 16 - 23.

Warren, M. Q. Classifications of offenders as an aid to efficient management and effective treatment. The journal of criminal law, criminology and police science, 1971, 162, 239 - 258.

Table 1

Background Variables and Descriptions of These Variables

1. Age.
2. Race coded (1) white (2) other.
3. Years of education completed.
4. Marital status coded (1) single (2) other.
5. Occupational level before arrest using length of education and training required as criterion. Coded as (0) unemployed, (1) unskilled, (2) semi-skilled, (3) skilled, (4) paraprofessional (5) professional.
6. Whether or not offender is a veteran. Coded (1) yes (2) no.
7. If a veteran, what was his discharge? Coded (1) honorable (2) other.
8. Father's occupation level based upon length of training. Coded as #5.
9. Number of siblings.
10. Birth rank.
11. Is offender returning to live with parents? (1) yes (2) no.
12. Mother's age at offender's birth. Coded (1) less than 18, (2) 18-21, (3) 22-27, (4) 28-35, (5) 36-44.
13. Offender's starting salary upon release.
14. Number of prior full-time jobs held.
15. Longest prior job (in months).
16. Per week maximum salary for prior jobs.

17. Stated vocational choice level of offender while in prison.
18. Alcohol use was coded as existing if offender stated he had used any alcohol before his arrest. Coded (1) yes (2) no.
19. Marijuana use was coded as existing if offender stated any past use. Coded (1) yes (2) no.
20. LSD use was coded as existing if offender stated any past use. Coded (1) yes (2) no.
21. Heroin was coded if offender stated any past use. Coded (1) yes (2) no.
22. Cocaine use was coded if offender stated any past use. Coded (1) yes (2) no.
23. Number of prior convictions for which offender has been incarcerated.
24. Felonious theft was coded if offender's present conviction was for any form of larceny. Coded (1) yes (2) no.
25. Drug offense was coded if present conviction was for any drug violation. Coded (1) yes (2) no.
26. Assault was coded if offender's present offense involved any attack or threat to others. Coded (1) yes (2) no.
27. Violation of property was coded if offender's present offense involved any theft. Coded (1) yes (2) no.
28. Violation of person was coded if offender's present conviction involved a threat of violence to other people. Coded (1) yes (2) no.

29. Victimless crime was coded if offender's present offense involved no actual victim who prosecuted the offender. This generally included drug offenders and sexual deviations. Coded (1) yes (2) no.
30. Wide Range Achievement Test for Reading.
31. Wide Range Achievement Test for Spelling.
32. Wide Range Achievement Test for Arithmetic.
33. Minnesota Multiphasic Personality Test was coded for thirteen of its scales.
34. Wechsler Adult Intelligence Scale was coded for the verbal, performance and full scales.
35. The Revised Beta score was coded for each offender.
36. The amount Vocational Rehabilitation spent on each offender after his release.

Table 2

Number of Offenders with Appropriate Information, Means and Standard Deviations for Each Group and Variable

Variable	N	Mean	Standard Deviation
GED Program	142	1.90	0.36
C W Program	142	1.41	0.49
Detail Program	142	1.69	0.46
Age	142	18.94	1.78
Race	142	1.43	0.49
Education	142	9.03	2.20
Marital Status	142	1.14	0.35
Occupation	135	1.70	0.82
Veteran	142	1.89	0.30
Discharge	17	1.64	0.93
Father's Occupation	124	2.22	0.87
Siblings	140	1.60	1.66
Birth Rank	139	3.02	2.15
Living With Parents	140	1.20	0.43
Mother's Age Birth	117	2.64	1.17
Salary Max. After Release	130	103.00	30.61
Number of Jobs	141	2.19	1.19
Longest Job	137	11.57	13.03
Salary Max. Before Release	134	95.90	33.77

Vocational Choice	127	2.85	0.55
Alcohol Use	142	1.30	0.46
Pot Use	142	1.63	0.48
LSD Use	142	1.88	0.32
Heroin Use	142	1.76	0.42
Cocaine Use	142	1.92	0.26
Use of Drugs in General	142	1.82	0.36
No. of Prior Arrests	142	1.82	1.26
Felonious Theft	141	1.26	0.44
Narcotic Offense	141	1.90	0.30
Assault Offense	141	1.90	0.29
Homicide Offense	141	1.99	0.08
Violation of Property	141	1.26	0.44
Violation of Person	141	1.89	0.30
Victimless Crime	141	1.90	0.30
WRAT Reading	137	58.78	31.90
WRAT Spelling	46	61.50	39.56
WRAT Arithmetic	46	68.10	33.14
WAIS Verbal	35	85.60	9.90
WAIS Performance	34	93.94	10.79
WAIS Full Scale	34	88.52	10.33
Amount VR Spends	141	40.73	7.22

Table 3

Percentage and Number of Offenders in Three Rehabilitation Programs with Re-arrests within a Year and Totals

	Re-arrests within One Year		
	Yes	No	Total
Graduate Equivalency Diploma			
N	2	10	12
% of GED % of arrests	16% of GED 8% of re-arrests	84% of GED 12% of non-arrests	11% of Total
Carpentry and Welding			
N	14	48	63
% of C W % of arrests	22% of C W 54% of re-arrests	78% of C W 59% of non-arrests	58% of Total
Detail			
N	10	23	33
% of detail % of arrests	30% of detail 38% of re-arrests	70% of detail 28% of non-arrests	31% of Total
Total	26 Total re-arrests	81 Total non-arrests	108

Table 4

Number of Offenders in Three Rehabilitation Programs

with Employment Levels and Totals

Employment Levels Six Months After Release

	Unemployed	Unskilled	Semiskilled	Skilled	Total
Graduate Equivalency Diploma N	1	1	12	2	16 11% of Total
Carpentry and Welding N	9	14	38	22	83 59% of Total
Detail N	4	8	24	7	43 30% of Total
Total	14	23	74	31	142

Table 5

Background Variables Related to Re-arrests for Each

Prison Program with Regression Weights

Variables for Success in GED

Father's Occupation $N = 76$ Regression Weight = 0.0982

$R^2 = 0.0297$ $F = 2.27$ $p < .14$

The lower the father's occupation level the more likely re-arrest.

Pot Use $N = 76$ Regression Weight = 0.2125

$R^2 = 0.0629$ $F = 2.72$ $p < .08$

The less pot used the less likely re-arrest.

Cocaine Use $N = 76$ Regression Weight = -0.2856

$R^2 = 0.1052$ $F = 2.82$ $p < .05$

Cocaine users are more likely to be re-arrested.

Veteran $N = 76$ Regression Weight = -0.2869

$R^2 = 0.1363$ $F = 2.80$ $p < .05$

Veterans are less likely to be re-arrested.

Variables for Success in Carpentry - Welding Program

Race $N = 76$ Regression Weight = 0.2929

$R^2 = 0.1039$ $F = 8.59$ $p < .01$

Whites less likely to be re-arrested.

Vocational Choice $N = 76$ Regression Weight = -0.1533

$R^2 = 0.1338$ $F = 5.64$ $p < .01$

The higher the vocational choice level the less likely re-arrest.

Variables for Success in Detail

Violation of person $N = 76$ Regression Weight = 0.4199

$R^2 = 0.1215$ $F = 10.24$ $p < .01$

Offenders who committed violation of person crimes are more likely re-arrested.

Number of siblings $N = 76$ Regression Weight = -0.0625

$R^2 = 0.1951$ $F = 8.85$ $p < .01$

The more siblings the more likely re-arrest.

Race $N = 76$ Regression Weight = -0.2372

$R^2 = 0.2314$ $F = 7.23$ $p < .01$

Whites less likely to be re-arrested.

V R Spends $N = 76$ Regression Weight = -0.0019

$R^2 = 0.2666$ $F = 6.24$ $p < .01$

The more V R spends the more likely re-arrest.

Revised Beta $N = 76$ Regression Weight = -0.0053

$R^2 = 0.2876$ $F = 5.66$ $p < .01$

The higher the Beta score the less likely re-arrest.

Table 6

Variables Related to Arrest Combining All Programs

Race $N = 55$ Regression Weight = -0.2962

$R^2 = .1911$ $F = 12.76$ $p < .01$

Whites less likely to be re-arrested.

Prior Arrest $N = 55$ Regression Weight = -0.1479

$R^2 = 0.2980$ $F = 11.75$ $p < .01$

The more prior arrests the more likely re-arrest.

Birth Rank $N = 55$ Regression Weight = -0.0419

$R^2 = 0.3361$ $F = 8.78$ $p < .01$

The higher the birth rank the more likely re-arrest.

Violation of Person $N = 55$ Regression Weight = 0.2693

$R^2 = 0.3646$ $F = 7.32$ $p < .01$

Offenders who committed violation of person crimes are more likely re-arrested.

Table 7

Variables Related to Employment Level for All Groups

Combined with Regression Weights

Salary $N = 76$ Regression Weight = 0.0120

$R^2 = 0.1549$ $F = 13.57$ $p < .01$

As salary goes up, employment level goes up.

Wide Range Achievement-Reading $N = 76$ Regression Weight = 0.0028

$R^2 = 0.2135$ $F = 9.91$ $p < .01$

As reading level goes up, employment level increases.

V R Spends $N = 76$ Regression Weight = -0.0080

$R^2 = 0.2568$ $F = 8.29$ $p < .01$

The more V R spends, the lower the employment level.

Homicide Crime $N = 76$ Regression Weight = -2.5253

$R^2 = 0.3328$ $F = 8.88$ $p < .01$

Homicide offenders have lower job levels.

Marital Status $N = 76$ Regression Weight = -0.4030

$R^2 = 0.3647$ $F = 8.04$ $p < .01$

Married offenders have lower employment level.

Revised Beta $N = 76$ Regression Weight = 0.0179

$R^2 = 0.3919$ $F = 7.41$ $p < .01$

As Beta score increases, employment level increases.

Alcohol Use $N = 76$ Regression Weight = 0.2723

$R^2 = 0.4127$ $F = 8.08$ $p < .01$

Non-users of alcohol have a higher level of employment.

Violation of Property Offense $N = 76$ Regression Weight = 0.2386

$R^2 = 0.4282$ $F = 7.28$ $p < .01$

Offenders who committed violations of property crimes are more likely re-arrested.

Table 8

Actual Arrests, Classified Arrests, Percent Correct and Totals Using All Background Variables in a Discriminant Analysis

Classification of Arrest	Actual Re-arrests One Year After Release: Yes	No	Total
Yes	12	0	12
No	1	42	43
Total	13	42	55
% Correct	12/13 = 92%	42/42 = 100%	54/55 = 98%

Table 9

Actual Arrest, Classified Arrests, Percent Correct, and Totals Using Nine Variables in a Discriminant Analysis

Number of Classified Arrests	Actual Re-arrests One Year After Release: Yes	No	Total
Yes	14	8	22
No	14	47	61
Total	28	55	83
% Correct	14/28 = 50%	47/55 = 85%	61/83 = 73%

Table 10

Offender Program Choice, Classified Choice, Percent Correct and

Totals Using Nine Variables in a Discriminant Analysis

Classified Selection	Actual Offender Program Selection: GED	Carpentry & Welding	Detail	Total
GED	4	4	5	13
Carpentry & Welding	14	37	17	68
Detail	5	9	15	29
Total	23	50	37	110
% Correct	4/23 = 17%	37/50 = 74%	15/37 = 40%	56/110 = 51%

Appendix: Raw Data for Each Subject

Subject No.	Prison Program	Age	Race	Education	Marital Status	Occupational Level	Veteran
001	GED	18	2	09	1	1	2
002	Detail	21	2	12	1	2	1
003	Detail	18	2	03	1	2	2
004	C W	19	2	11	1	1	2
005	Detail	25	1	12	2	0	1
006	C W	21	2	12	1	2	2
007	C W	19	1	11	1	1	2
008	GED	19	2	09	1	1	2
009	Detail	17	2	07	1	1	2
010	Detail	18	1	11	1	1	2
011	C W	19	1	12	2	2	2
012	C W	20	1	08	2	2	1
013	Detail	18	2	11	1	2	1
014	C W	20	2	10	1	2	2

Discharge	Father's Occupation	No. of Siblings	Birth Rank	Living with Parents	Mother's Age	Salary	No. of Prior Jobs
N/A	1	1	7	1	3	000	2
1	2	2	3	1	3	104	1
N/A	N/A	2	5	1	4	000	1
N/A	4	1	5	1	4	080	3
1	N/A	0	1	2	2	124	1
N/A	2	2	1	1	2	106	2
N/A	3	2	2	1	3	080	5
N/A	2	4	1	1	2	100	2
N/A	0	5	5	1	2	080	1
N/A	N/A	5	2	1	2	100	2
N/A	2	3	2	1	4	085	1
2	2	--	9	2	--	---	3
2	2	0	1	2	--	096	1
N/A	2	1	4	1	3	090	3

Longest Job	Maximum Salary	Vocational Choice	Alcohol	Marijuana	LSD	Heroin	Cocaine
04	074	2	2	2	2	2	2
03	090	3	1	1	2	1	2
49	080	3	2	2	2	2	2
20	054	3	1	2	2	1	2
07	075	3	1	1	1	2	2
10	094	3	1	2	2	1	2
15	100	3	1	2	2	1	2
12	050	3	2	2	2	2	2
16	085	2	2	2	2	2	2
12	100	5	1	1	1	1	2
29	130	3	1	2	2	2	2
17	100	3	1	2	2	2	2
01	090	2	1	1	2	2	2
07	100	3	1	1	2	1	1

Prior Convictions	Felonious Theft	Drug Offense	Assault	Violation of Property	Violation of Person	Victimless Crime
1	1	2	2	1	2	2
1	1	2	2	1	2	2
1	1	2	2	1	2	2
1	2	1	2	2	2	1
1	2	1	2	2	2	1
2	2	1	2	2	2	1
3	1	2	2	1	2	2
2	1	2	2	1	2	2
1	2	2	2	1	1	2
2	2	2	2	2	2	2
1	1	2	2	1	2	2
1	2	2	2	2	2	2
1	2	1	2	2	2	1
5	1	2	2	1	2	2

Reading	Spelling	Math	Beta	Amount V R Spends	Re-arrested w/in One Year	Employment Level
042	---	---	051	010	2	0
066	---	---	091	000	2	1
020	---	---	051	010	1	0
104	---	---	112	010	2	2
---	---	---	114	010	2	3
087	---	---	079	020	2	2
082	---	---	101	089	2	3
000	---	---	095	010	2	2
020	---	---	063	010	1	0
115	---	---	118	010	2	2
077	---	---	107	030	2	2
106	---	---	111	010	1	0
057	---	---	078	010	2	2
020	029	042	085	010	1	0

Subject No.	Prison Program	Age	Race	Education	Marital Status	Occupational Level	Veteran
015	Detail	19	2	10	1	2	2
016	C W	18	2	11	1	0	2
017	C W	20	2	07	1	1	2
018	GED	17	2	10	1	2	2
019	Detail	19	2	09	1	2	2
020	C W	17	1	08	1	0	2
021	GED	19	2	07	1	2	2
022	Detail	19	1	07	2	2	2
023	GED	18	2	10	1	2	2
024	C W	17	1	05	1	2	2
025	Detail	18	1	06	1	1	2
026	GED	20	1	10	2	2	2
027	C W	19	2	11	1	0	2
028	C W	17	1	09	1	1	2
029	C W	18	2	11	1	0	2
030	Detail	20	2	07	2	1	2

Discharge	Father's Occupation	No. of Siblings	Birth Rank	Living with Parents	Mother's Age	Salary	No. of Prior Jobs
N/A	2	7	5	1	3	130	2
N/A	2	0	1	2	1	151	--
N/A	3	0	9	1	2	160	2
N/A	2	1	8	1	5	106	1
N/A	--	1	1	1	3	120	3
N/A	1	0	4	1	4	096	4
N/A	1	0	2	2	1	080	2
N/A	3	2	2	1	2	150	3
N/A	2	0	3	1	--	100	1
N/A	2	1	5	1	4	080	4
N/A	2	0	2	1	3	105	2
N/A	1	1	1	--	3	086	3
N/A	--	0	1	1	1	106	1
N/A	2	1	2	1	--	---	1
N/A	2	1	9	1	4	100	0
N/A	--	0	7	1	4	114	2

Longest Job	Maximum Salary	Vocational Choice	Alcohol	Marijuana	LSD	Heroin	Cocaine
12	126	3	1	1	2	2	2
--	---	3	1	1	2	2	2
24	090	3	2	1	1	1	2
15	095	3	1	1	2	2	2
16	078	3	1	1	2	1	1
09	076	3	2	2	2	2	2
03	094	3	1	1	2	1	2
24	090	2	1	2	2	2	2
03	080	3	1	1	2	2	2
24	090	3	1	2	2	2	2
03	083	3	2	2	2	2	2
21	098	3	1	1	1	2	2
01	068	2	2	2	2	1	2
01	080	3	2	2	2	2	2
00	000	3	1	1	2	1	1
44	085	--	2	2	2	2	2

Prior Convictions	Felonious Theft	Drug Offense	Assault	Violation of Property	Violation of Person	Victimless Crime
3	1	2	2	1	2	2
1	1	2	2	1	2	2
2	1	2	2	1	2	2
1	1	2	2	1	2	2
1	2	1	2	2	2	1
2	1	2	2	1	2	2
2	1	2	2	1	2	2
2	2	2	2	2	1	2
3	1	2	2	1	2	2
1	1	2	2	1	2	2
3	1	2	2	1	2	2
1	1	2	2	1	2	2
3	1	2	2	1	2	2
1	1	2	2	1	2	2
3	1	2	2	1	2	2
3	2	2	2	2	2	2

Reading	Spelling	Math	Beta	Amount V R Spends	Re-arrested w/in One Year	Employment Level
036	032	030	076	025	2	1
063	---	---	110	025	--	--
020	---	---	075	010	1	0
081	103	069	095	000	1	0
---	---	---	---	060	--	--
046	---	---	---	---	--	--
020	---	---	084	010	1	0
022	---	---	087	010	--	--
013	018	047	074	010	--	--
020	---	---	096	000	--	--
020	---	---	109	047	--	--
115	---	---	107	030	--	--
084	---	---	095	010	1	0
061	097	050	106	010	2	0
040	---	---	084	000	2	1
013	017	032	088	000	2	2

Subject No.	Prison Program	Age	Race	Education	Marital Status	Occupational Level	Veteran
031	C W	16	1	09	1	0	2
032	C W	17	1	07	2	2	2
033	Detail	19	2	11	1	--	2
034	C W	18	2	09	1	1	2
035	Detail	17	1	09	1	0	2
036	Detail	18	2	08	1	2	2
037	Detail	22	1	09	2	2	2
038	Detail	19	1	12	1	1	2
039	C W	16	1	06	1	0	2
040	Detail	21	1	11	2	2	2
041	C W	21	1	10	1	3	1
042	Detail	18	1	06	1	1	2
043	GED	19	1	07	1	3	2
044	Detail	21	2	10	1	2	2
045	Detail	19	2	12	1	2	2
046	Detail	21	1	08	1	3	2

Discharge	Father's Occupation	No. of Siblings	Birth Rank	Living with Parents	Mother's Age	Salary	No. of Prior Jobs
N/A	3	0	1	1	5	093	1
N/A	2	0	4	1	2	080	3
N/A	2	6	4	2	--	130	0
N/A	2	2	5	1	--	000	2
N/A	1	4	6	1	2	090	0
N/A	2	0	3	1	1	110	3
N/A	3	1	3	2	3	120	3
N/A	3	0	3	1	5	090	1
N/A	1	7	3	1	--	---	5
N/A	3	0	1	1	--	106	3
1	4	0	1	2	3	122	3
N/A	2	1	6	1	3	---	4
N/A	3	0	7	1	3	160	1
N/A	--	2	3	2	3	101	1
N/A	3	2	9	1	5	092	2
N/A	2	2	2	1	2	200	4

Longest Job	Maximum Salary	Vocational Choice	Alcohol	Marijuana	LSD	Heroin	Cocaine
02	060	2	1	2	2	2	2
12	110	3	2	2	2	2	2
00	000	3	1	1	2	1	2
08	108	--	1	1	2	2	2
00	000	3	2	2	2	2	2
06	080	3	1	1	2	2	2
12	120	--	1	1	2	1	2
18	044	3	1	1	2	1	2
24	200	--	1	1	2	2	1
06	086	2	1	1	2	1	2
04	130	3	2	1	1	1	2
07	080	3	1	2	2	2	2
28	080	3	1	2	2	2	2
12	135	--	1	1	2	2	2
15	120	3	1	1	2	2	2
27	140	3	1	2	2	2	2

Prior Convictions	Felonious Theft	Drug Offense	Assault	Violation of Property	Violation of Person	Victimless Crime
2	1	2	2	1	2	2
2	1	2	2	1	2	2
1	1	2	2	1	2	2
4	1	2	2	1	2	2
1	1	2	2	1	2	2
3	2	2	2	2	1	2
1	1	2	2	1	2	2
1	1	2	2	1	2	2
3	1	2	2	1	2	2
1	1	2	2	1	2	2
1	2	1	2	2	2	1
9	1	2	2	1	2	2
1	1	2	2	1	2	2
2	1	2	2	1	2	2
2	2	2	2	2	1	2
2	1	2	2	1	2	2

Reading	Spelling	Math	Beta	Amount V R Spends	Re-arrested w/in One Year	Employment Level
064	---	---	107	050	--	--
020	---	---	083	010	--	--
059	---	---	083	065	2	3
027	027	029	089	083	1	0
069	000	000	117	055	1	0
032	---	---	087	194	1	0
093	037	082	105	000	--	--
111	---	---	121	026	2	3
082	---	---	121	604	1	0
070	103	088	101	000	1	0
158	167	163	117	000	2	3
040	---	---	101	010	1	0
073	---	---	083	066	2	3
029	029	039	075	000	--	--
087	159	082	104	044	1	0
069	---	---	106	040	--	--

Subject No.	Prison Program	Age	Race	Education	Marital Status	Occupational Level	Veteran
047	C W	18	2	09	1	2	2
048	C W	18	1	09	1	2	2
049	C W	19	2	09	1	1	2
050	C W	24	2	12	1	2	2
051	Detail	21	2	09	2	2	2
052	C W	19	2	10	1	1	2
053	C W	18	2	10	1	--	2
054	Detail	19	2	10	1	2	2
055	C W	18	1	10	1	2	2
056	GED	18	1	08	1	2	2
057	C W	23	1	10	2	2	2
058	GED	18	1	10	1	2	2
059	C W	17	1	08	1	--	2
060	Detail	25	2	13	1	3	1
061	C W	18	1	06	1	3	2
062	C W	19	1	08	1	2	2

Discharge	Father's Occupation	No. of Siblings	Birth Rank	Living with Parents	Mother's Age	Salary	No. of Prior Jobs
N/A	2	1	9	2	--	090	1
N/A	2	3	1	1	1	140	2
N/A	2	4	1	1	2	100	2
N/A	2	0	2	2	1	090	3
N/A	--	1	2	1	3	086	2
N/A	1	2	4	1	4	090	1
N/A	1	5	2	1	1	---	2
N/A	2	6	7	1	4	---	4
N/A	3	3	1	1	1	---	1
N/A	2	3	4	1	1	103	2
N/A	2	2	1	1	3	100	4
N/A	2	1	1	1	1	074	3
N/A	3	1	2	1	2	080	1
1	--	0	1	0	3	106	4
N/A	3	1	1	1	2	100	2
N/A	1	3	2	2	--	180	5

Longest Job	Maximum Salary	Vocational Choice	Alcohol	Marijuana	LSD	Heroin	Cocaine
05	078	3	1	2	2	2	2
10	100	3	1	2	2	2	2
12	100	3	1	2	2	2	2
09	076	--	1	1	2	1	1
18	105	--	1	1	2	1	2
01	100	3	1	2	2	2	2
02	066	3	1	2	2	2	2
02	110	2	1	2	2	2	2
02	080	3	2	2	2	2	2
18	090	2	1	1	1	2	2
07	130	3	1	2	2	2	2
08	085	3	1	2	2	2	2
08	---	3	1	2	2	2	2
05	100	3	1	1	2	2	2
06	100	3	1	1	1	2	2
12	130	3	1	2	2	2	2

Prior Convictions	Felonious Theft	Drug Offense	Assault	Violation of Property	Violation of Person	Victimless Crime
1	1	2	2	1	2	2
1	2	2	2	2	2	2
1	1	2	2	1	2	2
1	1	2	2	1	2	2
1	2	1	2	2	2	1
1	1	2	2	1	2	2
3	1	2	2	1	2	2
5	1	2	2	1	2	2
1	1	2	2	1	2	2
1	1	2	2	1	2	2
3	1	2	2	1	2	2
2	1	2	2	1	2	2
2	1	2	2	1	2	2
1	2	2	2	2	1	2
2	1	2	2	1	2	2
3	1	2	2	1	2	2

Reading	Spelling	Math	Beta	Amount V R Spends	Re-arrested w/in One Year	Employment Level
022	---	---	071	010	2	2
027	---	---	097	010	2	3
045	---	---	084	035	2	3
109	087	058	079	010	2	2
063	---	---	086	010	2	0
029	---	---	084	000	--	--
070	---	---	090	030	2	2
044	---	---	083	040	2	0
066	---	---	089	010	2	2
021	018	048	090	035	2	2
073	---	---	091	090	2	2
077	---	---	113	010	--	--
070	---	---	012	010	2	2
064	---	---	101	010	2	2
022	018	045	103	081	2	3
097	---	---	110	110	2	3

Subject No.	Prison Program	Age	Race	Education	Marital Status	Occupational Level	Veteran
063	C W	17	1	09	2	3	2
064	Detail	18	1	11	1	0	2
065	Detail	19	1	12	1	2	2
066	C W	18	2	08	1	2	2
067	Detail	22	2	05	1	1	2
068	C W	18	2	11	1	0	2
069	C W	19	1	10	1	3	2
070	Detail	19	2	11	1	3	2
071	C W	17	2	09	1	2	2
072	C W	17	2	10	1	3	2
073	C W	19	1	10	1	3	2
074	Detail	19	1	07	1	1	2
075	C W	18	1	09	1	2	2
076	Detail	17	2	08	1	3	2
077	GED	19	1	11	1	3	1
078	Detail	18	2	12	1	2	2

Discharge	Father's Occupation	No. of Siblings	Birth Rank	Living with Parents	Mother's Age	Salary	No. of Prior Jobs
N/A	5	0	3	1	2	120	6
N/A	3	1	1	1	1	125	1
N/A	2	2	3	2	--	106	3
N/A	2	4	5	1	4	100	1
N/A	2	2	7	1	4	078	1
N/A	--	0	1	2	1	098	1
N/A	2	1	2	1	2	120	2
N/A	3	2	3	1	2	098	2
N/A	3	3	6	1	3	090	1
N/A	2	0	1	1	2	097	2
N/A	5	--	3	1	4	120	1
N/A	2	0	3	1	3	064	4
N/A	3	1	1	2	--	110	4
N/A	3	3	3	1	4	130	4
2	3	0	5	1	--	129	1
N/A	1	3	3	1	--	090	2

Longest Job	Maximum Salary	Vocational Choice	Alcohol	Marijuana	LSD	Heroin	Cocaine
05	084	3	2	2	2	2	2
45	115	--	1	1	1	1	2
10	100	3	2	2	2	2	2
20	096	3	1	2	2	2	2
99	070	3	1	2	2	2	2
03	100	3	1	2	2	1	2
03	230	3	2	1	1	1	2
06	200	3	2	1	2	1	2
03	066	3	1	2	2	2	2
02	080	3	1	2	2	2	2
48	120	3	1	2	2	2	2
12	070	--	1	2	1	2	2
10	160	3	1	2	2	2	2
03	070	3	2	2	2	2	2
--	---	3	2	2	2	2	2
05	086	3	1	2	2	2	2

Prior Convictions	Felonious Theft	Drug Offense	Assault	Violation of Property	Violation of Person	Victimless Crime
3	2	2	2	2	2	2
1	1	2	2	1	1	2
1	1	2	2	1	2	2
2	1	2	2	1	2	2
1	1	2	2	1	2	2
1	1	2	2	1	2	2
1	1	2	2	1	2	2
1	1	2	2	1	2	2
2	1	2	2	1	2	2
5	1	2	2	1	1	2
1	2	2	2	2	2	2
4	1	2	2	1	2	2
1	1	2	2	1	2	2
3	1	2	2	1	2	2
1	2	2	2	2	2	2
3	1	2	2	1	2	2

Reading	Spelling	Math	Beta	Amount V R Spends	Re-arrested w/in One Year	Employment Level
065	057	052	083	010	--	--
079	057	067	100	000	2	0
106	---	---	112	010	2	2
044	---	---	079	020	2	2
---	---	---	069	015	2	2
020	029	026	073	035	1	0
165	097	156	106	010	--	--
061	072	061	104	123	2	1
020	---	---	089	000	2	2
070	057	055	091	010	1	0
097	097	088	116	080	1	0
062	---	---	080	000	2	2
059	039	121	084	074	2	3
062	---	---	100	074	1	0
084	060	088	110	076	2	1
020	---	---	071	061	1	0

Subject No.	Prison Program	Age	Race	Education	Marital Status	Occupational Level	Veteran
079	GED	18	2	10	1	0	2
080	C W	21	1	11	1	2	1
081	C W	17	1	09	1	2	2
082	C W	19	1	11	1	1	2
083	C W	18	2	11	1	2	2
084	C W	18	2	08	1	1	2
085	Detail	17	2	10	1	0	2
086	GED	18	1	09	2	2	2
087	Detail	18	1	10	1	0	2
088	C W	24	1	07	1	2	2
089	C W	20	1	09	1	2	2
090	C W	17	2	10	1	2	2
091	C W	18	2	05	1	1	2
092	Detail	16	1	08	1	0	2
093	C W	20	1	11	1	2	2
094	C W	18	1	09	1	2	2

Discharge	Father's Occupation	No. of Siblings	Birth Rank	Living with Parents	Mother's Age	Salary	No. of Prior Jobs
N/A	2	4	1	1	2	090	2
2	--	0	1	2	--	082	2
N/A	3	3	3	1	1	110	3
N/A	3	0	1	1	4	140	3
N/A	3	4	2	1	2	090	2
N/A	--	0	5	2	--	---	1
N/A	2	1	1	1	2	090	2
N/A	3	1	2	1	3	080	4
N/A	2	2	2	1	3	100	0
N/A	2	0	1	2	1	110	2
N/A	2	1	2	1	1	143	2
N/A	2	4	2	1	2	128	1
N/A	2	1	2	1	4	---	3
N/A	2	1	1	1	3	120	0
N/A	3	0	5	1	4	080	2
N/A	1	3	4	1	3	100	3

Longest Job	Maximum Salary	Vocational Choice	Alcohol	Marijuana	LSD	Heroin	Cocaine
11	110	1	2	1	2	1	2
19	094	3	2	2	2	2	2
09	076	3	2	2	2	2	2
05	140	2	1	2	2	2	2
02	068	3	1	1	2	2	2
15	068	3	2	2	2	2	2
03	072	1	2	2	2	2	2
06	100	3	2	1	2	2	2
--	---	3	1	2	2	2	2
12	100	3	1	2	2	2	2
03	141	2	1	1	1	2	2
02	094	3	2	2	2	2	2
16	110	--	1	2	2	2	2
--	---	3	2	2	2	2	2
02	---	3	2	2	2	2	2
04	100	3	1	2	2	2	2

Prior Convictions	Felonious Theft	Drug Offense	Assault	Violation of Property	Violation of Person	Victimless Crime
1	1	2	2	1	2	2
2	1	2	2	1	2	2
1	1	2	2	1	2	2
1	2	2	2	2	1	2
1	1	2	2	1	2	2
2	1	2	2	1	1	2
1	1	2	2	1	2	2
4	1	2	2	1	2	2
1	1	2	2	1	2	2
3	1	2	2	1	2	2
1	1	2	2	1	2	2
1	1	2	2	1	2	2
1	1	2	2	1	1	2
2	1	2	2	1	2	2
1	1	2	2	1	2	2
3	1	2	2	1	2	2

Reading	Spelling	Math	Beta	Amount V R Spends	Re-arrested w/in One Year	Employment Level
133	159	107	099	010	2	2
073	---	---	106	010	1	0
042	---	---	103	010	2	2
104	---	094	110	010	2	2
072	---	---	091	010	1	0
000	---	---	069	036	2	0
015	018	032	095	094	2	1
068	060	---	109	035	2	1
097	109	059	090	514	2	1
079	---	---	105	050	--	--
026	037	053	101	064	--	--
033	037	057	076	094	2	1
000	---	---	062	000	1	0
067	072	045	093	030	2	1
077	---	---	107	010	2	2
075	077	094	090	055	1	0

Subject No.	Prison Program	Age	Race	Education	Marital Status	Occupational Level	Veteran
095	C W	21	1	09	1	2	2
096	GED	18	1	08	1	2	2
097	C W	20	1	07	1	2	2
098	Detail	18	2	10	1	0	2
099	C W	19	1	08	1	2	1
100	C W	18	1	08	1	2	2
101	C W	23	1	11	2	3	1
102	C W	20	2	06	1	2	2
103	C W	18	1	10	2	1	2
104	C W	19	2	09	1	2	2
105	Detail	17	2	08	1	2	2
106	C W	17	1	06	2	3	2
107	C W	17	1	08	1	2	2
108	C W	17	1	11	2	3	2
109	GED	19	1	06	2	2	2
110	C W	17	1	10	1	2	2

Discharge	Father's Occupation	No. of Siblings	Birth Rank	Living with Parents	Mother's Age	Salary	No. of Prior Jobs
N/A	2	1	3	1	1	090	3
N/A	2	2	4	1	3	170	2
N/A	2	1	3	1	1	190	2
N/A	2	2	3	1	3	146	1
1	2	1	1	1	3	140	3
N/A	2	1	7	2	4	150	1
2	2	0	2	2	--	080	3
N/A	1	0	1	2	--	---	3
N/A	5	0	2	2	3	120	2
N/A	--	0	2	1	2	110	1
N/A	2	4	1	1	1	086	2
N/A	2	0	6	1	4	106	2
N/A	3	0	3	2	5	100	3
N/A	3	0	2	2	3	090	2
N/A	0	4	4	1	4	098	2
N/A	--	0	1	0	--	080	1

Longest Job	Maximum Salary	Vocational Choice	Alcohol	Marijuana	LSD	Heroin	Cocaine
05	084	--	1	2	2	2	2
12	140	5	1	1	1	2	2
12	190	3	1	2	2	2	2
03	---	--	1	2	2	2	2
06	100	3	2	1	2	2	2
24	140	2	1	2	2	2	2
10	108	3	1	2	2	2	2
01	082	3	1	2	2	2	2
02	106	3	1	1	1	2	2
20	064	3	1	1	2	1	2
10	078	2	1	2	2	2	2
04	140	3	2	2	1	1	1
05	100	2	1	2	2	2	2
10	080	--	2	2	2	2	2
06	150	2	2	2	2	2	2
14	074	3	1	2	2	2	2

Prior Convictions	Felonious Theft	Drug Offense	Assault	Violation of Property	Violation of Person	Victimless Crime
1	1	2	2	1	2	2
1	2	1	2	2	2	1
2	1	2	2	1	2	2
2	2	2	2	2	2	2
2	1	2	2	1	2	2
1	1	2	2	1	2	2
1	1	2	2	1	2	2
2	1	2	2	1	2	2
2	2	2	2	2	2	2
1	2	1	2	2	2	1
2	1	2	2	1	2	2
2	1	2	2	1	2	2
1	1	2	2	1	2	2
1	1	2	2	1	2	2
2	2	2	2	2	2	2
9	1	2	2	1	2	2

Reading	Spelling	Math	Beta	Amount V R Spends	Re-arrested w/in One Year	Employment Level
068	---	---	081	025	2	3
050	067	076	110	084	2	2
021	---	---	091	102	2	2
090	---	---	118	089	2	2
087	087	089	093	137	--	--
072	---	---	099	010	--	--
077	---	---	104	010	2	3
020	---	---	048	---	2	1
097	107	121	109	080	2	2
019	016	024	080	010	2	2
020	---	---	085	010	--	--
059	---	---	097	056	2	2
038	045	050	101	103	2	2
068	---	---	095	053	2	3
046	---	---	104	035	2	2
045	---	---	076	052	2	2

Subject No.	Prison Program	Age	Race	Education	Marital Status	Occupational Level	Veteran
111	C W	18	1	11	1	2	2
112	C W	20	1	09	1	2	1
113	C W	19	2	10	1	2	2
114	GED	22	2	10	1	1	2
115	C W	19	1	10	1	2	2
116	Detail	19	2	09	1	2	2
117	C W	17	1	09	1	2	2
118	C W	20	1	08	2	2	2
119	C W	18	1	08	1	1	2
120	Detail	23	1	12	1	2	1
121	C W	20	2	10	1	--	2
122	C W	19	1	10	1	2	2
123	C W	18	2	12	1	1	2
124	C W	21	2	10	2	3	2
125	C W	18	1	10	1	1	2
126	C W	20	2	11	1	2	2

Discharge	Father's Occupation	No. of Siblings	Birth Rank	Living with Parents	Mother's Age	Salary	No. of Prior Jobs
N/A	2	4	1	1	1	090	2
2	0	0	6	1	5	080	2
N/A	--	1	--	1	2	100	1
N/A	--	0	--	2	--	114	2
N/A	2	1	7	1	4	090	1
N/A	2	4	4	1	2	104	2
N/A	0	1	3	1	4	000	2
N/A	2	1	1	1	3	115	2
N/A	3	3	3	1	3	090	1
1	3	0	1	1	3	105	4
N/A	2	5	5	1	3	064	2
N/A	--	1	1	1	1	160	3
N/A	3	3	3	1	2	080	1
N/A	3	1	2	2	2	120	4
N/A	3	2	6	1	3	120	2
N/A	1	0	2	1	--	102	3

Longest Job	Maximum Salary	Vocational Choice	Alcohol	Marijuana	LSD	Heroin	Cocaine
06	080	3	1	1	2	2	2
06	096	3	1	2	2	2	2
15	116	3	1	1	2	1	2
05	086	3	2	2	2	2	2
15	100	2	1	2	2	2	2
08	100	2	2	2	2	2	1
04	094	3	2	1	1	1	1
11	100	3	1	2	2	2	2
06	090	3	1	2	2	2	2
08	100	--	1	2	2	2	2
60	044	3	1	1	2	2	2
07	086	3	2	2	2	2	2
04	072	2	2	2	2	2	2
04	120	3	1	1	2	2	2
48	070	3	2	2	2	2	2
04	090	5	1	1	2	1	1

Prior Convictions	Felonious Theft	Drug Offense	Assault	Violation of Property	Violation of Person	Victimless Crime
1	2	1	2	2	2	1
2	1	2	2	1	2	2
2	1	2	2	1	2	2
2	1	2	2	1	2	2
1	2	2	2	2	1	2
1	1	2	2	1	2	2
2	1	2	2	1	2	2
2	2	2	2	2	2	2
1	1	2	2	1	2	2
1	2	2	2	2	1	2
3	2	2	2	2	2	2
2	1	2	2	1	2	2
1	1	2	2	1	2	2
1	1	2	2	1	2	2
3	1	2	2	1	2	2
2	1	2	2	1	1	2

Reading	Spelling	Math	Beta	Amount V R Spends	Re-arrested w/in One Year	Employment Level
064	---	---	111	030	2	2
075	---	---	098	021	2	2
072	087	053	115	025	2	0
065	---	---	089	010	2	2
097	---	---	106	000	--	--
018	012	055	069	025	1	0
065	063	100	112	082	2	0
068	026	100	105	010	2	2
075	---	---	104	028	2	2
068	---	---	104	000	2	2
063	---	---	078	030	--	--
073	---	---	104	025	--	--
---	---	---	077	027	2	2
048	047	061	110	087	--	--
068	---	---	077	010	2	3
068	---	---	088	010	--	--

Subject No.	Prison Program	Age	Race	Education	Marital Status	Occupational Level	Veteran
127	C W	19	2	12	1	--	2
128	C W	23	1	06	1	2	2
129	Detail	21	2	09	1	2	2
130	C W	18	1	10	1	2	2
131	C W	19	1	--	1	2	2
132	C W	18	1	07	1	2	2
133	GED	20	1	09	1	--	1
134	C W	18	1	05	2	2	2
135	C W	19	1	03	1	2	2
136	Detail	18	2	11	1	2	2
137	Detail	19	2	09	1	1	2
138	C W	20	1	09	1	3	2
139	Detail	22	1	10	1	2	1
140	C W	22	1	11	1	2	1
141	C W	17	1	08	1	--	2
142	Detail	17	2	08	1	1	2

Discharge	Father's Occupation	No. of Siblings	Birth Rank	Living with Parents	Mother's Age	Salary	No. of Prior Jobs
N/A	2	2	2	1	3	100	2
N/A	3	0	1	2	1	110	5
N/A	3	1	4	1	--	090	3
N/A	3	0	1	1	2	110	4
N/A	2	4	1	1	1	090	2
N/A	1	3	2	1	4	090	2
2	3	0	3	2	2	080	3
N/A	2	3	1	1	1	---	1
N/A	2	0	1	1	3	090	3
N/A	2	4	2	1	2	110	2
N/A	--	0	3	2	5	088	4
N/A	2	0	1	1	1	110	1
1	2	1	7	1	--	120	2
3	2	2	2	1	--	---	4
N/A	3	4	3	1	2	098	0
N/A	3	4	--	--	--	120	3

Longest Job	Maximum Salary	Vocational Choice	Alcohol	Marijuana	LSD	Heroin	Cocaine
09	080	3	1	1	2	1	2
05	090	3	2	1	1	1	1
07	086	3	1	2	2	2	2
02	090	3	2	1	2	1	2
02	080	3	1	2	2	2	2
20	085	3	1	2	2	2	2
22	065	3	2	2	2	2	2
02	082	3	1	2	2	2	2
18	074	3	1	2	2	2	2
16	070	2	1	2	2	2	2
03	086	2	1	1	2	1	1
12	065	3	1	2	2	2	2
05	120	2	1	1	2	2	2
05	174	3	1	2	2	2	2
--	---	3	2	1	1	1	2
12	106	--	1	2	1	1	2

Prior Convictions	Felonious Theft	Drug Offense	Assault	Violation of Property	Violation of Person	Victimless Crime
1	2	1	2	2	2	1
1	2	1	2	2	2	1
1	1	2	2	1	2	2
2	1	2	2	1	2	2
2	2	2	2	2	2	2
1	1	2	2	1	2	2
1	2	2	2	2	2	2
1	--	--	--	--	--	--
3	1	2	2	1	2	2
1	2	2	2	2	1	2
2	1	2	2	1	2	2
2	1	2	2	1	2	2
1	1	2	2	1	2	2
2	2	2	2	2	2	2
2	2	1	2	2	2	1
1	1	2	2	1	1	2

Offender Background

86

Prior Convictions	Felonious Theft	Drug Offense	Assault	Violation of Property	Violation of Person	Victimless Crime
1	2	1	2	2	2	1
1	2	1	2	2	2	1
1	1	2	2	1	2	2
2	1	2	2	1	2	2
2	2	2	2	2	2	2
1	1	2	2	1	2	2
1	2	2	2	2	2	2
1	--	--	--	--	--	--
3	1	2	2	1	2	2
1	2	2	2	2	1	2
2	1	2	2	1	2	2
2	1	2	2	1	2	2
1	1	2	2	1	2	2
2	2	2	2	2	2	2
2	2	1	2	2	2	1
1	1	2	2	1	1	2

Reading	Spelling	Math	Beta	Amount V R Spends	Re-arrested w/in One Year	Employment Level
063	---	---	093	029	2	3
020	---	---	080	167	2	1
020	---	---	076	010	--	--
091	063	121	111	015	2	3
086	---	---	093	010	2	0
027	042	027	095	010	--	--
097	---	---	112	092	--	--
020	---	---	079	010	1	0
020	---	---	079	052	2	1
020	---	---	099	010	2	2
---	---	---	079	000	--	--
052	---	---	085	033	2	2
076	---	---	107	115	--	--
077	---	---	095	000	1	0
092	---	---	099	050	--	--
020	---	---	092	010	2	2