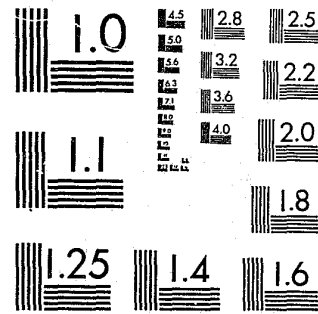


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EVALUATION OF RISK SCREENING
IN THE
CONNECTICUT OFFICE OF ADULT PROBATION:
REPORT II

by

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PREFACE

As a result of recent advancements in Connecticut and elsewhere, probation risk classification has attained a new, more functional stage of development. Although the merits of individual risk classification models are likely to be judged nationally on the basis of such criteria as managerial utility and transferability to other jurisdictions, it is important to understand that classification benefits are realized legitimately only after various methodological as well as managerial issues have been explored and resolved. This evaluation project was conducted to investigate and address some of these issues. Our primary objective was to evaluate and document the predictive qualities of the Connecticut Case Management/Risk Predictive Instrument.

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EVALUATION OF RISK SCREENING
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REPORT II

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INTRODUCTION

Inherent to the concept of probation is the hypothesis that the supervision process reduces the likelihood that probationers will engage in further criminal activity. The arduous task of structuring and monitoring the probationer's behavior in the community setting has traditionally been accomplished through an informal process of client evaluation and individualized case planning to address special offender needs.

The probation officer typically develops a series of evaluative judgements concerning the client's risk, needs and motivational level during the initial portion of the probation term. After a number of contacts the officer establishes a profile of the offender's personal and behavioral characteristics. The efficient probation officer may informally categorize clients according to special needs and problems and accordingly allocate additional time for those clients who may require or benefit from these resources. Although this traditional method of case evaluation has been considered adequate in the past, recent technological discoveries involving empirical measurement of client needs and levels of risk can further enhance the officer's efficiency in servicing large probation caseloads.

Empirical risk prediction as a caseload management tool was introduced in the Connecticut Judicial Department, Office of Adult Probation (COAP) in 1977. Through the use of a weighted risk screening instrument, the probation officer calculates a "risk predictive score" for each new client on the basis of six parameters. The risk screening instrument enables

staff to rapidly differentiate between high and low-risk cases and provides guidelines for the development of appropriate supervision strategies.

Although Connecticut's risk prediction model provides strong evidence supporting the accuracy and usefulness of statistical prediction, the probation officer's professional judgement is also recognized as an essential component in the development of supervision plans and strategies. Empirical prediction is therefore viewed as a legitimate and useful diagnostic reference tool.

Introduction of the risk predictive instrument is important for several reasons. First, increasing workloads have dramatically decreased the time available for personal client contact. Consequently, as this reduction adversely affects the quality of client intake diagnosis and evaluation, the need existed for devices which can assist in the rapid assessment of new clients.

When traditional methods of case analysis are supplemented with a standardized and reliable screening process, the officer can also reduce the likelihood of improper or incomplete diagnosis. Furthermore, a system of objective identification of low risk clients serves to substantially reduce supervision workload.

Additionally, uniform collection of standard case data furnishes valuable managerial information. Decisions regarding staff allocation, for example, can be based on accurate data describing caseload risk distribution for given probation field units. Finally, the evaluative tool provides a descriptive summary of all clients within the department's jurisdiction.¹

The Connecticut statutes mandate formal presentence investigations for all convicted felons. Since, however, the vast majority of probation clients are convicted of misdemeanor offenses (approximately 80 percent), a need existed for rapid and standardized assessment of all new referrals.

After adopting the Differential Caseload Management by Objectives (DCMBO) Project on a statewide basis, significant benefits were immediately realized. For example, the project immediately demonstrated that many clients do not require intensive supervision. Through a process of reliable identification of a low risk subpopulation, COAP has been able to reduce active caseloads by 25 percent. Beyond the obvious cost-effectiveness benefits, the system maintains various provisions for upgrading and standardizing case management and supervision planning activities. (Chapter one provides a detailed description of the DCMBO instrument, caseload strategies, and administrative policies.)

¹For a description of agencies currently using prediction and classification instruments, see: National Institute of Corrections, "Classification Instruments for Criminal Justice Decisions: Probation/Parole Level of Supervisions Sourcebook," American Justice Institute (with the National Council on Crime and Delinquency), 1979 (Aug.) Vol. 2(4).

Realizing the importance of a timely evaluation of the DCMBO program, COAP secured funding assistance from the National Institute of Corrections during February of 1979. Under the direction of the Caseload Classification Coordinator's Office in collaboration with New England Management Services, Inc., (NEMS), an independent consulting group, a summary report entitled "Evaluation of Risk Screening in the Connecticut Office of Adult Probation," was issued during February of 1980. Preliminary results, based on 8,991 cases, revealed a nearly perfect linear relationship between risk predictive scores and probationer success/failure rates.² Recognizing the significance of these preliminary findings, COAP and NEMS conducted a second evaluation project in May of 1980. This second project was designed to enlarge the earlier data base and to refine the original predictive instrument. The evaluation team discovered, for example, that many of the risk predictive parameter sub-classifications could be consolidated without diminishing the remarkable predictive power of the instrument. A streamlined version of the original instrument was developed during January of 1981. (Chapter two of this report describes the method used to expand the data base and to streamline the risk screening system).

²The preliminary report also addressed such issues as inter-rater scoring reliability, administrative goals and objectives for the DCMBO program, a pre-post analysis of caseload strategy, and staff suggestions for improvement of the DCMBO instrument.

The revised risk screening format is expected to further improve COAP's ability to provide an efficient and effective level of probation supervision service.

CHAPTER ONE:

THE DCMBO PROGRAM IN CONNECTICUT'S OFFICE OF ADULT PROBATION

1.1 Purpose of the DCMBO Program

On May 1, 1977, the Connecticut Judicial Department, Office of Adult Probation (COAP), initiated use of a caseload classification/management information system known as Differential Caseload Management by Objectives (DCMBO). The heart of the DCMBO classification system is a risk screening instrument which was developed by COAP and subsequently validated for use with felony and misdemeanor probationers in Connecticut.

Risk prediction is based on six major variables, each found to be strongly correlated with success/failure on probation (See Display 1). These variables include severity of the instant offense, prior record, age, education, employment, substance abuse-mental health, and family structure. During a series of preliminary interviews, the probation officer rates and scores each client according to the weighted indices. High scoring individuals are identified as "low-risk" while low scoring clients are considered "high-risk."

The DCMBO program in Connecticut has achieved two principle goals. First, it provides an efficient method of workload management by eliminating a substantial portion of the active caseload enabling reallocation of staff time for servicing higher risk/need cases. Secondly, the DCMBO automated data file provides improved management information for administrative decision making.

Predictive validity was of primary concern in the design and utilization of the Connecticut Risk Predictive tool. Although some of the

original sub-scales had been demonstrated to have risk predictive qualities in various locations with differing offender populations, it was imperative that the tool accurately differentiate between successful and unsuccessful probation case outcomes in Connecticut. Since some periods of probation are of two or three years in length, this amount of time was required to collect the outcome data required to formally validate the instrument.

1.2 The Differential Caseload Management by Objectives Program

The following description provides a general overview of the original DCMBO instrument developed in Connecticut in 1976. The screening tool (Display 1) makes use of six criteria which are separated into two indices: the Criminal Index and the Behavioral and Environmental Adjustment Index. The Criminal Index is determined by the "severity" of the instant offense and the offender's age in conjunction with the number and type of previous criminal convictions.

1. Severity of the instant offense is scored on a seven point scale (0-6). A high score, six, indicates a minor misdemeanor and a low score, one, represents a serious felony. Additional counts serve to lower the score.
2. Previous criminal record is rated according to convictions and age. Given the same conviction history, the younger offender's prior record scores are usually lower, indicating a slightly greater risk to the community.

The Behavioral and Environmental Adjustment Index includes four additional risk-predictive criteria which also facilitate identification of an offender's major problem areas.

3. Where Educational Level achieved is higher, less risk is assigned.
4. Employment, Schooling and Training are scored as a function of the number of months of such activity during the preceding year. Half credit, proportionately, is given for part-time activity. Disabilities precluding employment related activity are taken into consideration.
5. Drug and/or Alcohol Abuse and Mental Health are rated according to severity and whether active or prior problem is noted.
6. Residence and Family Ties are weighted according to the individual's existing situation. (Effort is made to assess the quality as well as the structure of family relationships.)

Adult Probation case classification in Connecticut involves an assessment of client risk, client needs and client motivation. Client motivation is subjectively determined through a series of interviews. The sum of points assigned for the six screening criteria represents the probationer's total risk-predictive score. High scoring individuals are identified as low-risk probationers and, conversely, low scoring individuals are considered high risks in the community. Risk-predictive scores range from one to forty-nine. The subset of clients scoring in the upper range, 33 to 49 points at intake, are defined as low-risk clients (37 to 49 points for teenage clients).

Provided the probation officer does not note special conditions of probation, i.e. court stipulated drug treatment or restitution, or other significant case factors indicating a need for control/supervision, cases in the "low-risk" range receive minimal supervision. The low-risk offenders are identified as Model I or self-help clients. This model comprises the first of three levels of control/supervision.

The subset of clients scoring in the lower range, (1 through 32 or 1 through 36 for teenagers at intake), are considered high-risk offenders. These clients receive mandatory supervision and are further classified into one of two models of supervision, Model II or Model III.

Discretion regarding determination of high and low risk is permitted and advised. However, in cases for which supervision models are inconsistent with objective numerical risk-predictive scores, case notes should indicate specifically those case factors which affect the probation officers' classification decision, i.e. violent nature of the offense, serious mental illness, etc.

Client Needs and Motivation

High risk clients are interviewed further by the supervising probation officer in order to subjectively assess the new client's immediate needs as well as his willingness to contract for a mutually advantageous behavioral supervision goal.

Client motivation is functionally defined as the probationer's willingness and ability to work with the probation officer to alter specific negative behaviors or improve specific positive behaviors. Clients who are satisfied with current "negative" life-styles or who are

unable to admit or recognize their needs and problem areas are considered unmotivated. Clients who agree to undertake education, employment, or various other positive rehabilitative goals, but fail to exert a consistent effort to do so, or who do not perform the behaviors to which they have committed themselves, are also considered to be unmotivated. High risk, unmotivated clients, as well as offenders who are stipulated by court order to abide by special conditions of probation such as restitution or participation in drug programs, are classified as Model II or monitor/control cases.

High risk, but motivated clients are classified as Model III supervision cases (goal-oriented). These probationers have agreed to work toward achievement of a specified behavioral objective. Model III supervision often involves community resource referral in areas such as education, job training, employment, psychiatric counseling or substance abuse. In some cases, however, the achievement of the probationer's goal, which has been determined to be advantageous to both the offender and the community, involves personal involvement and ongoing assistance on the part of the probation officer, i.e. job hunting, personal counseling, etc. In all Model III cases, the probation officer monitors, evaluates and encourages progress toward goal achievement.

Objectives, strategies and activity standards for probation supervision differ markedly for the three models. Model I, or low-risk cases comprise approximately 25% of the entire statewide caseload. The primary supervision objective is to reduce personal contact in order to minimize correctional intervention into the lives of low-risk offenders.

Student interns and volunteers are often utilized with this group to aid with paper and recording processes and to provide minimal supervision requirements. A supervision plan of reduced contact commences immediately after a thorough explanation of probation conditions and requirements. This low-risk/low intervention strategy increases available staff time for the servicing of high-risk probation clients.

Activities involved in the supervision of the low-risk, Model I client include:

1. An initial office interview whereby minimal conditions and requirements of probation are thoroughly explained to the client.
2. Minimal client monitoring, contact and field note maintenance to be conducted by volunteers, student interns or appropriate probation staff.
3. Conducting a final personal interview with the client for evaluation according to the Behavioral and Environmental Adjustment Index and Final Outcome Index scales which are included in the screening form for evaluative purposes.

In accordance with the agency goal that high risk offenders receive maximum control/supervision, the primary supervision objective for the Model II group is to provide effective control through close monitoring and surveillance. With this subset of the client population (comprising approximately 55% of the statewide caseload), the officer is concerned primarily with enforcing conditions of probation and protecting the community against further offenses on the part of the probationer. Staff concentrate their efforts on prompt detection of criminal activity and

speedy processing of probation violators. A higher rate of probation violation, revocation and incarceration of repeat offenders result from the high-risk, poorly motivated client population. The Model II strategy of maximizing quality and quantity of client contacts is designed to ensure frequent monitoring of the probationers' activities. Greater control is intended to facilitate deterrence and detection of further criminal behavior.

Activity standards for Model II supervision are as follows:

1. An initial office interview whereby the officer thoroughly explains conditions and requirements for supervision under the control/supervision model.
2. One to four personal contacts monthly. These encounters are to include home, field and office appointments.
3. One to four collateral, corroborative contacts to be made with family, school officials and/or employers on a monthly basis.
4. Maintenance of accurate and comprehensive field notes.
5. Conducting annual and/or final evaluative assessment according to the Behavioral and Environmental Adjustment Index and the Final Outcome Index for planning and evaluative purposes.

Approximately one in five probationers under supervision in Connecticut is grouped as a Model III client. Model III probationers accept formal treatment plans designed to provide intensified services usually involving referrals, counseling and individual follow up. Model III supervision often relies on community resources to achieve the service delivery objectives specified in each case plan. Model III strategy

therefore emphasizes analysis of the probationer's needs and utilization of existing outside services to effect the changes mutually agreed upon. A cooperative attitude without achievement of corresponding behavioral change is considered insufficient progress toward fulfillment of the Model III planned objectives. Failure to make behavioral progress, according to the supervision contract, is basis for returning the probationer to Model II control/surveillance supervision status. The concurrent strategy of directing Model III probationers to the appropriate outside service providers frees staff time for more effective control/supervision of Model II offenders.

Activity standards for Model III supervision include, but are not limited to:

1. Initial behavioral goal contracting between the probation officer and the probationer.
2. Recording all service referral and resource development activities.
3. Updating or setting revised/new subgoals.
4. Maintaining contact to encourage, assist and evaluate progress towards accomplishment of the specific goals and narrowly defined subgoals.
5. Conducting annual and/or final adjustment and outcome evaluations.

When the DCMB0 program was initially operationalized, most clients were serviced as part of a multi-model "mixed" caseload. Each probation officer was therefore accountable for high and low risk probationers and for those considered motivated as well as unmotivated. Officers tended to divide their supervision time and resources evenly throughout their

caseloads but were often prone to emphasize personal preferences or philosophies regarding the goals of supervision.

Professional staff skills also vary considerably. Although many probation officers are competent in all supervision areas, some officers excel at law enforcement activities such as surveillance, processing warrants and effectuating arrests, while others are concerned primarily with client counseling, resource development and referral activities.

By matching staff preferences and skills with client types in several experimental probation field units, COAP intended to test the feasibility and practicality of supervision specialization on a pilot basis. Major developmental areas were expected to include:

1. The development and refinement of probationer/probation officer "matching" methodology.
2. Detection and amelioration of administrative problems resulting from procedural changes in case assignment and supervision.
3. Observation of attitudinal and behavioral problems on the part of line staff resulting from specialized roles.

Approximately one third of Connecticut's 29 field services units are currently operating as "specialized service units" whereby probation officers are responsible for the supervision of Model II or Model III clients. An evaluation of the effectiveness and merit of this concept is currently underway.

1.3 Summary

During May, of 1977, the Differential Caseload Management by Objectives Program was employed on a statewide basis. Use of a risk

predictive instrument containing six weighted items was intended to assess the offenders probability of engaging in further criminal activity during the probationary term. Clients perceived to possess a low risk of failure are classified as "Model I" and receive minimal attention. Higher risk clients are actively supervised according to a needs assessment and determination of their ability and willingness to accept treatment plans. Although the final risk score determines which clients should receive attention, officers are afforded discretionary powers based on their personal impression of the client during initial interviews or other case factors not included in the formal risk screening instrument. Moreover, client progress is continuously monitored and any overriding developments may result in supervision or treatment changes. The more recent implementation of specialized service units is designed to match the supervision/treatment preferences of the officer to the client and to test the feasibility and effectiveness of supervision specialization.

CHAPTER TWO: AN EMPIRICAL EVALUATION OF CONNECTICUT'S
RISK PREDICTIVE INSTRUMENT

2.1 Data Collection

The principal objective of this project was to evaluate the ability of the DCMBO instrument to statistically predict probationer risk. An effective empirical risk prediction instrument must identify and prioritize the characteristics contributing to risk. The evaluation was, therefore, designed to examine the qualities of the total instrument as well as the six components of the risk predictive scale. This approach facilitated the implementation of structural instrument revisions designed to simplify and to improve the accuracy of risk screening.

Intake screening information and corresponding discharge evaluation data served as the primary data sources for the evaluation. Each new referral is screened by the supervising probation officer within 30 days of referral. Subsequently, as clients are discharged, the officer evaluates changes in the Behavioral and Environmental Adjustment Index and completes the Final Outcome Index, a scale describing the reason for termination. These two indices provide a simple, yet complete case profile for clients as they enter and exit the term of probation supervision. The evaluation project focused on comparisons of the total intake risk score as well as each component of the score with the actual case outcome.

To avoid the common problems and issues associated with sampling techniques, project coordinators examined the entire client population serviced by the DCMBO program. Intake data was gathered for each

probationer referred to the Connecticut Office of Adult Probation from July of 1977 to October of 1980 (39 months). All data included in the DCMB0 intake form, except client name, were coded and recorded on a ten-megabyte disk cartridge. A total of 41,800 intake cases were processed during the evaluation.

The intake data base was subdivided into two major parts for analysis purposes. Cohort I was developed to accommodate the evaluation phase of the study as many of these cases were matched to the corresponding discharge form. Cohort I consisted of 30,565 intake cases screened between July of 1977 and October of 1979. All clients included in this file were sentenced to probationary terms greater than six months in duration. Clients receiving probation sentences of six or fewer months were not screened and treated according to DCMB0 guidelines and were therefore unavailable for study. Cohort II, designed to provide managerial data to COAP administrators, included 11,235 intake cases referred to the agency between October of 1979 and October of 1980. Discharge data was not recorded for Cohort II cases, as information was not yet available for clients serving probation sentences longer than one year at the conclusion of the study. Although discharge data was available for many clients screened after October of 1979, they were short-term (one year or less) successful cases or longer-term unsuccessful cases which had been terminated earlier than expected. Project coordinators believed the Cohort I data base would provide a more representative sample of long and short term cases for the evaluation.

Discharge (case outcome) data was computerized for 14,300 Cohort I probationers who terminated probation supervision between July of 1977 and October of 1980. Coded identification numbers, assigned to each case throughout the supervision term, were used to match discharge data to the corresponding Cohort I intake data file. The remaining 16,265 Cohort I probationers were terminated after October of 1980 and were excluded from further consideration. The final matched data base, therefore, contained complete case profiles for 14,300 clients serviced over a 39 month period.

Display 2 graphically illustrates the data collection activities along horizontal time lines. The upper line represents various intake screening dates while the lower line includes discharge dates. Under ideal circumstances, the computerized data base would contain more extensive collection of matched cases. The time lines reveal, however, that this goal could be achieved only if discharge data were gathered for several more months. The existing data base of 14,300 cases provides complete information for the majority of the long term (greater than six month) probationers referred to COAP during the 27 month period, and has been shown to be representative of the COAP caseload.

2.2 Data Analysis

The analytical conclusions reached in this chapter were based on the matched (intake and discharge) Cohort I data file. The ordinal properties of the risk parameters and the dichotomous nature of case outcomes precluded the use of several sophisticated multivariate comparisons. For example, the relationship between prior criminal record and case outcome relies on data aggregated into various classification

structures and must employ a Chi-square test of the differences between frequencies. Comparisons between the total risk score, an interval scale, and success/failure rates can, however, be treated by correlation and regression analysis. All computations were performed according to established statistical techniques.

2.21 Evaluation of Risk Score and Case Outcome

The Final Outcome Index served as the criterion for describing client success and failure. Each probationer released under outcome category five, "no conviction while on probation," was defined as a successful client. This definition of success also excludes any cases for which violations were alleged or charged by the supervising probation officer. Clients terminated under any of the remaining outcome categories were considered failures.

The outcome indices, shown below, were included on the client's discharge record:

- 1A. Actual violation of probation determined by court:
probation revoked
- 1B. Actual violation of probation determined by court:
probation continued
2. Presentment in court as violator or application made for
arrest warrant
3. Convicted for subsequent offense while on probation
resulting in incarceration
4. Convicted for subsequent offense while on probation not
resulting in incarceration
5. No conviction while on probation

The evaluation team examined the relationship between the total risk score and population outcome rates shortly after the data base had been installed. Display 3 is a scattergraph which illustrates the linear relationship obtained when total risk scores were compared to client failure rates. Total risk scores were blocked at two point intervals on the horizontal axis to minimize the effect of sparsely represented half-point and single point intervals. The mean failure rate for a given two-point interval was calculated as follows:

$$F = \frac{f1 + f2}{T1 + T2}$$

where F = mean failure rate

where f1 = number of failure cases observed at the first risk score

where f2 = number of failure cases observed at the second risk score

where T1 = total number of cases observed at the first risk score

where T2 = total number of cases observed at the second risk score

The scattergraph suggests that a strong relationship exists between the total risk score and population failure (or success) rates. That is, clients assigned higher risk scores were far less likely to be discharged as a failure case than those receiving lower scores. The resulting regression equation is $(y = -1.51 x + 68.13)$ with a correlation coefficient of -0.990.

The evaluation team also conducted a similar analysis of failure rates by single risk score intervals. Population failure rates were first tested for equality across the full range of risk scores. The hypothesis

that all population failure rates are equal to 20.59% (the average) was rejected ($\chi^2 = 865.11$; d.f. = 43; $p < .001$). The correlation coefficient at single point intervals was computed as $r = -.988$. Thus, approximately 97.6 percent ($r = .976$) of the variation in population failure rates was attributed to the risk score. The linear regression line is $\text{failure (\%)} = -1.40(\text{risk score}) + 64.30$.

The DCMBO system is not designed to predict risk for a given client, rather, it predicts the risk level for a large group of similar clients. It was, however, interesting to examine the relationship between risk scores and individual case outcomes. The quality of this relationship was measured using a point biserial correlation since outcome was treated as a dichotomous (success vs. failure) scale. The point biserial correlation at single risk point intervals was calculated as $r_{pb} = +.828$. The statistical significance of r_{pb} was evaluated by the t-test using the hypothesis that $r_{pb} = 0$. At the .001 level of a two-tailed test, t was found to be significant ($t = 176.56$ where d.f. is infinity). The results of these tests are summarized in Display 4 and the raw data is furnished in Display 5.

Based on the statistical evidence presented above, the evaluation team believes that the DCMBO instrument offers remarkable predictive accuracy. The ability of this device to successfully forecast population risk levels has not been duplicated by any other program known to the the evaluation team. The results of this analysis suggest that empirical risk prediction is a powerful clinical tool which must be acknowledged as a viable approach to client assessment. The unparalleled accuracy of the

DCMBO instrument can be regarded as a significant contribution fo further technological advancements in the field of behavior prediction.

2.22 Evaluation of Risk Parameters and Case Outcomes

This study also examined the predictive abilities of the six risk parameters individually. The analysis was originally intended to provide the data necessary for making structural revisions within the DCMBO instrument. Because the total risk score was found to be highly correlated to case outcomes (refer to Section 2.1), the evaluation team realized that numerous modifications could impair the quality of the existing instrument. After a preliminary analysis, the evaluation team discovered that each risk classification could be consolidated without diminishing the quality of the total risk predictive score. The study therefore focused on eliminating redundant categories within each index rather than developing a wide array of new parameters and scoring guidelines. The minor revisions that were introduced to improve the efficiency of the instrument are discussed below.

1. Severity of the Instant Offense

This index was designed to weigh the seriousness of the client's conviction according to six misdemeanor and felony classifications. The probation officer rates the client's most serious offense and subtracts one point for each additional count and/or offense. The original index was scored on a seven point range (0-6).

The evaluation team conducted tests which compared offense classifications with client success/failure rates. The data analysis contained in Display 6 indicated that 65.6 percent of the probationers who

received zero points at intake (serious and/or multiple offenses) were subsequently discharged as "successful" cases. Clients convicted of "Class C" misdemeanor offenses (scored as six points) were more likely to be successfully terminated (86.5%)

The statistical evaluation of this index suggested that the seven categories could be combined to form two major divisions: felony vs. misdemeanor. Chi-square tests of the difference between success/failure frequencies for misdemeanor and felony classifications yielded a significant difference ($\chi^2 = 93.09$ with 1 d.f. at $p < .001$; upper limit $\chi^2 = 14,300$). The Phi-Coefficient ($\phi = .006$) and the Contingency Coefficient ($c = 0.080$ where maximum $c = 0.71$) provided further evidence to support this modification.

The evaluation team discovered that a statistically significant relationship existed between the felony and misdemeanor classifications and case outcomes. By simply rating the most serious offense as a misdemeanor or felony, the predictive power of the instrument was not substantially reduced and the probation officer could save valuable supervision time. (The procedures used to assign points to both variables are discussed in Section 2.23.)

2. Prior Record (and Age)

This parameter was originally designed to assess the extent of the client's previous criminal activity. The prior record score was a function of the probationer's age and conviction history. The range of possible scores (0-12) was weighted to suggest that younger clients constitute a greater risk to the community than older clients. For

example, an 18 year old with three prior convictions received six points while a client over 60 years of age with the same record was scored as ten points. The index required that felonies be "converted" to misdemeanors (one felony is equivalent to three misdemeanors) before calculating the final score. Further provisions were also included to convert juvenile commitments and juvenile probation adjudications to equivalent misdemeanors for 16 to 19 year old clients.

Meaningful comparisons between the prior record score and case outcomes were not possible since scores were weighted by client age. For example, a prior record score of eight could represent four misdemeanors for a client over 60, or three misdemeanors for a client between 24 and 35 years, or two misdemeanors for a 16 to 19 year old client. The evaluation team therefore examined the number of prior convictions for each age group rather than the prior record score.

Display 7 graphically illustrates the relationship between prior convictions for each age group and case outcomes. (Clients over 60 years old were not included since very few cases were found with more than one prior conviction. It was hypothesized that older offenders with an extensive criminal record were typically incarcerated).

The graph indicated that clients with no prior record have lower failure rates than those with seven or more convictions. It also appeared that younger clients, regardless of prior conviction history, were less successful than older clients. However, a significant degree of variance existed within and between various age groups. Clients between 20 and 23 years old with six prior convictions were more successful than clients of

the same age with five convictions. Likewise, clients between 46 and 60 years old with three prior convictions were more likely to fail than clients between 24 and 27 years with an identical record.

The evaluation team concluded that the interaction between age and prior record variables had contributed to deviations in client outcome rates. It was hypothesized that consistent measurements could be obtained if both variables were isolated and scored independently. The following tests were conducted to evaluate this theory.

Comparisons between outcome rates by the number of prior convictions were presented in Display 8. Client age was not considered for this analysis for the reasons outlined above. Therefore, the table represents the mean outcome rate of all combined age groups. The findings suggest a strong relationship between the number of prior convictions and case outcome. This supports the results obtained in Display 7 where clients with fewer convictions were generally more successful than those with multiple convictions. Chi-square tests provided further proof that case outcomes rates were related to the number of prior convictions ($\chi^2 = 1037.2$, $p < .001$, d.f. = 7 where upper limit of $\chi^2 = 14,212$). Finally, the Contingency Coefficient ($C = 0.26$ where maximum $C = 0.71$) and Cramer's V ($V = 0.27$) were used to measure the strength of the relationship between prior record and case outcome.

The evaluation team analyzed client age groups and case outcome rates independently. Display 9 presents the data obtained in the analysis. According to the table, younger clients were more likely to be discharged as failure cases than older clients. These results also coincide with

those found in Display Eight. Chi-square tests were again employed to verify the relationship between client age and case outcomes ($\chi^2 = 2333.1$, $p < .001$, d.f. = 6 where upper limit of $\chi^2 = 14,235$). The Contingency Coefficient ($C = 0.13$ where maximum $C = 0.71$) and Cramer's V ($V = 0.13$) also suggest that client age and case outcomes are statistically correlated.

Based on the evidence presented above, it is apparent that client age and prior record could be more efficiently scored as individual parameters. The independent prior record index revealed that failure rates change in direct proportion to the client's prior conviction record. Likewise, failure rates were indirectly proportional to client age when age groups were treated independently. Although similar results were obtained when both variables were simultaneously scored by the existing prior record parameter, the evaluation team concluded that independently scored items resulted in more consistent and reliable measurements of client success (failure) rates.

Once the decision had been reached to isolate the two variables, the evaluation team identified and consolidated redundant categories within both parameters. The original prior record index contained eight subcategories (seven or more misdemeanor equivalent convictions to no prior convictions). Display 8 indicated that clients convicted of three, four, five, or six misdemeanors exhibited similar outcome rates. Likewise, those convicted of one or two misdemeanor equivalents appeared to be compatible. Chi-square tests, summarized in Display 10, supported the argument that four subcategories would provide an efficient and

accurate measurement of client risk for the prior record index: seven or more misdemeanor equivalents vs. three to six misdemeanor equivalents vs. one to two misdemeanor equivalents vs. no prior record.

A similar analysis was conducted for the client age parameter. Display 9 suggested that probationers could be classified by three rather than seven age ranges: 16 to 19 years vs. 20 to 35 years vs. 36 years and older. These modifications were also validated by Chi-Square tests presented in Display 11.

To summarize, the evaluation team discovered wide variations in outcome rates within and between each age group in the prior record index. Consistent and proportional outcome rates were observed when age and prior record variables were isolated. Both variables were then condensed into smaller categories to enhance the efficiency of the DCMB0 instrument.

3. Extent of Education

This parameter was developed to assess the level of education completed by the client. The point scale ranged from zero (less than eighth grade) to nine points (post high school education or training).

The evaluation team compared educational levels with client success/failure rates. The data presented in Display 12 revealed that 92.6 percent of the probationers who completed post high school education or training programs were discharged as "successful" cases. Those with an eighth grade education were far less likely to be successfully terminated (70.1%). Success rates tend to support the theory that higher levels of education reduce the client's risk to the community.

One interesting contradiction in the data was observed. Clients with a less than eighth grade education were nearly as successful as those who completed the eleventh grade. A wide array of exploratory tests failed to provide any explanation for this phenomenon. For example, the evaluation team hypothesized that clients with a less than eighth grade education were older (and therefore more successful) clients who had left school for economic reasons. Statistical analysis, however, suggested that clients with a less than eighth grade education were equally represented among each age group. This flaw in the prediction instrument was considered minor since less than five percent of the matched data base contained probationers of this type.

The eight categories of the education parameter were consolidated and refined to improve the efficiency of the risk predictive instrument. The quantitative tests presented in Display 13 indicated that only four categories were necessary to accurately score client educational levels: 8th, 9th, or 10th grade vs. 11th or less than 8th grade vs. high school graduate (or G.E.D.) vs. post high school education or training. Success rates were therefore "blocked" into four new groups: 70.9%, 79.5%, 85.3%, and 90.6% respectively.

4. Employment Related Activities

This parameter was designed to evaluate the client's employment related activities during the past year. The probation officer must describe the type of activity (employment, school, training, etc.) as full or part time by checking the appropriate box(es). The number of full and/or part time "months of activity" determined the client's score.

Points assigned to this index ranged from zero (no activity) to nine (one full and one part time activity during the last 12 months).

The evaluation team compared total index scores with client success/failure rates to identify those categories which could be consolidated. Display 14 presents outcome data for each risk score found in the employment related activities index. The table suggested that clients who were active for several months were far more likely to be discharged as successful cases than those who were inactive.

Based on the statistical evidence found in Display 15, the evaluation team concluded that the employment-activity categories could be efficiently restructured. Four major levels were identified and the corresponding full time "months of activity ranges" were adjusted accordingly: zero to four months; five to eight months; nine to eleven months; and, twelve months.

The data analysis also indicates that clients who received more than six risk score points on the employment index were only slightly more successful than those receiving exactly six points. It was therefore necessary to assign an upper limit on the range of possible employment activity points. That is, full and/or part time points could be accumulated until the client's score is equivalent to one full time activity during the past twelve months. The "maximum score rule" would eliminate the need for computing the sum of several scores without reducing the predictive abilities of the index.

The statistical evaluation of the employment related activities index revealed that client success rates increase in direct proportion to the number of months of activity. Although the original index consisted of six categories defined by two month intervals, the evaluation team found that similar risk predictive data could be obtained with only four "months of activity" categories. Finally, the data analysis suggested that a maximum score, equivalent to one full time activity during the last twelve months, could be imposed since outcome rates for clients with scores greater than six points were not significantly different than the outcome rate for clients scoring six points.

5. Alcohol, Drug, and/or Mental Health Problems

This parameter was designed to assess the extent of any substance abuse or mental health problems detected by the supervising probation officer. Each of the three "elements" were independently rated according to the severity of the problem. The intensity of the client's problem is represented by a range of four possible scores (0, 3, 5, and 7). The lowest score assigned to the three elements generally served as the final score for the entire parameter. However, if two or more problems existed, the client received a score of zero for the index. In the event that the probationer had minor drug and alcohol problems (5 points), the final index score was assigned three points rather than zero.

The evaluation team realized that the final index score did not reflect the extent of a problem within any given element since it was based on the arrangement of scores between the three elements. The alcohol, drug and mental health scores were therefore isolated during the

data analysis. Comparisons of outcome rates for each element was possible since interference between the scores was eliminated.

The evaluation team first examined success/failures for each of the four scores assigned to the alcohol "index." Data presented in Display 16 indicated that clients perceived to have a serious alcohol problem were much more likely to be unsuccessfully terminated than clients with no alcohol problems.

The data analysis also suggested that clients with moderate and prior (or minor) alcohol problems exhibited similar success rates. It was therefore hypothesized that these two groups could be consolidated without reducing the predictive accuracy of the alcohol index. Chi-Square tests, shown in Display 17, indicated that no statistically significant differences in outcome rates occurred between clients scoring three points and those scoring five points. When the two groups were combined, differences were observed between the three new classifications (serious current problem vs. moderate, minor, or prior problem vs. no alcohol abuse problem).

Revisions in the alcohol abuse index are expected to increase the efficiency of the DCMB0 instrument. Because it is no longer necessary to distinguish between "moderate" and "prior or minor" problems, the probation officer will easily be able to identify the severity of the client's problem. This revision is also expected to improve inter-rater scoring reliability since the range of available choices are more clearly defined.

The evaluation team conducted a similar analysis for the drug abuse component of the parameter. Outcome rates for each of the four possible drug scores (0, 3, 5, and 7) were described in Display 18. Although few clients were considered to be serious drug abuse cases, their failure rates were exceptionally high (41.5%). This finding clearly supports the assumption that drug usage increases the probationer's risk to the community.

The statistical data presented in Display 19 indicated that no significant differences in outcome rates were observed between scores of three and five points. Therefore, clients rated as moderate, minor or prior drug abuse cases could be merged into a single classification. This would make the drug abuse index compatible with the alcohol index and enhance the efficiency of the instrument as well.

Finally, the evaluation team compared outcome rates for each mental health index score. Unfortunately, the mental health index was not included as a risk predictive factor when the original DCMB0 form was implemented in May of 1977. During July of 1978 the instrument was reprinted and the mental health index was selected as a new scoring criterion. Since mental health data was not available for the first fourteen months of the program, only 7,928 mental health cases were recorded in the Cohort I computer file.

Display 20 indicated that clients with no mental health problems were far more likely to be successfully terminated than clients with serious problems. These results supported the intuitive hypothesis that mental health problems increase the client's risk on probation.

Further tests, included in Display 21, revealed that no statistically significant differences in outcome frequencies were observed between scores of zero, three, or five. That is, clients rated as serious, moderate, prior or minor mental health cases exhibited similar success/failure rates. This would suggest that the mental health index could be efficiently scored as a dicotomous variable, i.e., mental health problems vs. no mental health problems. Because the mental health index is one component of a larger index, the evaluation team elected to retain the same modifications proposed for the alcohol and drug indices. Although the data analysis indicated that three classifications are not necessary, the mental health index would be consolidated to eliminate one scoring classification. The probation officer would therefore rate clients as serious or moderate/minor or no problem cases.

To summarize, the alcohol abuse, drug abuse, and mental health indices were isolated to compare outcome rates for each problem level. Statistical tests revealed that failure rates increased in direct proportion to the severity of the problem for each index. The evaluation team combined scores of three (moderate problem) and five (minor/prior problem) to improve the efficiency of the parameter and allow the probation officer to easily identify the appropriate problem level.

6. Existing Family Structure

This parameter was designed to evaluate the nature and quality of the client's family relationships. The six scoring categories, ranging from one to six points, assumed that clients with few or no family ties are considered high risk cases. Likewise, probationers who reside with their spouse and children or both parents were considered low risk clients.

The evaluation team conducted tests which compared existing family structure scores with client success/failure rates. The data analysis presented in Display 22 indicated that 67.1 percent of the probationers who received zero points at intake (residing away from family with few or no family ties) were subsequently discharged as "successful" cases. Clients residing in a two parent home or married and supporting their family were far more likely to be successfully discharged (84.5%). The statistical evaluation therefore suggests that family relationships influenced the client's risk to the community.

Unfortunately, wide variations in outcome rates were observed for clients who received two, three, three and one-half or four points. For example, separated/divorced probationers were more successful than any other group although they received just three points. Likewise, clients scored at four points (resides in one parent home or married without children) were only slightly more successful than clients receiving one point. The evaluation team therefore proposed several modifications designed to resolve the inconsistencies in outcome rates.

The first classification, resides away from family with few or no family ties, remained intact to denote "high" risk clients. The second classification represented clients previously scored as two, 3 1/2, or four points. This category was defined as "resides away from family with some ties or resides in a one parent home." The evaluation team hypothesized that clients "residing in a one parent home" were responsible for the low success rates observed in the group receiving four points. Probationers who were "married without children and supporting their

spouse" (also previously scored as four points) were included in a third category. This category, representing "low risk" clients, was defined as "resides with spouse or separated/divorced but caring for/supporting children or resides in two parent household." The third category was therefore composed of clients who previously scored three, four, or six points.

The data presented in Display 23 suggested that the proposed modifications are appropriate. Clients previously scored at four points were included in the second category for evaluation purposes (the proposed revisions would include an unknown proportion of these clients in the third category).

To summarize, the statistical analysis of the "existing family structure index" revealed that family relationships influence the client's risk in the community. Several revisions were introduced to resolve the variability in outcome rates observed within the six classifications. These modifications were designed to create three new classifications which would efficiently and accurately measure the client's family relationships.

2.23 Summary of Suggested Risk Parameter Modifications

Although the correlation and regression analysis described in Section 2.2 revealed a statistically significant relationship between total risk scores and client outcome rates, several modifications in each of the risk predictive parameters were introduced. These revisions, summarized below, were designed to minimize the amount of time necessary to screen new referrals and eliminate ambiguity within the scoring classifications

without reducing the predictive accuracy of the instrument. The following revisions were proposed by the evaluation team:

Severity of the Instant Offense

Felony

Misdemeanor

Prior Criminal Record

No Prior Record

1-2 Priors (misdemeanor equivalents)

3-6 Priors (misdemeanor equivalents)

7 or more Priors (misdemeanor equivalents)

Age

16 - 19 years

20 - 35 years

36 and older

Extent of Education

8th, 9th, or 10th grade completed

11th, or less than 8th grade

High School Graduate or G.E.D.

Post High School Education or Training

Employment Related Activities During Past 12 Months

- 0 - 4 months of activity
- 5 - 8 months of activity
- 9 - 11 months of activity
- 12 months of activity

Alcohol, Drug, and/or Mental Health Problems

- Serious Current Problem
- Moderate/Minor/Prior Problem
- No Problem

Existing Family Structure

- Resides away from family with few or no family ties
- Resides away from family with some ties or resides in one parent home
- Resides with spouse or separated/divorced but caring for/ supporting children or resides in two parent home

2.3 Revisions in the DCMB0 Weighting System

The original DCMB0 instrument utilized six weighted parameters to assign a total risk predictive score to each new probation referral. An ordinal scale, ranging from two to 49 points, was employed to empirically describe the client's risk level. The original weighting scheme became obsolete after many of the scoring categories within each parameter had been refined and consolidated. The evaluation team therefore designed a new scoring system to accommodate the revisions.

Two principal goals were established for the development of the new weighting system. First, the evaluation team attempted to preserve the high degree of predictive accuracy found in the original instrument. The proposed modifications were expected to slightly reduce the predictive capabilities of the system. However, any revisions which significantly diminished the quality of the instrument would impair the integrity of the program. All scoring adjustments were therefore verified by statistical techniques and computer simulation. Secondly, the new system was designed to resemble the original risk predictive scale. That is, total risk scores would not exceed a range of fifty points. Furthermore, total risk scores obtained in the new instrument would be similar to those in the original instrument. A client previously scored as 30 points, for example, should receive a score closely approximating 30 points from the new system. These standards were adopted to provide consistency between the two instruments and avoid a lengthy series of training sessions to familiarize probation offices with a unique scoring format.

2.31 Development of a Preliminary Model

Of the 14,300 matched Cohort I cases, 11,356 clients were successfully terminated while 2,944 were considered failure cases. As a baseline standard of performance, approximately 79.41 percent of Connecticut's probation population were discharged as successfully completing the probation sentence.

This standard (79.41) was used to calculate deviations from the success rates observed in each risk classification for the seven new parameters. The mean success rate for each new classification within the

risk parameter was first calculated. Success rates were then compared to the baseline standard. The sum of the absolute value of the deviations from the baseline were recorded. The result can be algebraically expressed as:

$$|A - 79.41| + |B - 79.41| + \dots + |n - 79.41|$$

Where A = mean success rate for the first new classification

Where B = mean success rate for the second new classification

Where n = mean success rate for the final new classification

For example, severity of the instant offense was calculated as follows. The "misdemeanor" classification was found to have a mean success rate of 81.71 (8246/10092) while the "felony" classification had a mean success rate of 74.43(2943/3954). The value assigned to the instant offense parameter was computed as 7.28 (2.3 + 4.98). Similar values were calculated for the remaining six parameters and are shown below.

	<u>Value</u>
Prior Criminal Record	47.99
Client Age	16.77
Extent of Education	25.64
Employment Related Activities	28.77
Alcohol, Drug and/or Mental Health Problems	
Alcohol	21.16
Drug	32.05
Mental Health	26.67
Existing Family Structure	22.09

The magnitude of these values is a function of the number of classifications within each parameter and the degree of variance between success rates and the baseline standard. The value is therefore a numerical representation of the "range" of success rates above and below the baseline population rate.

Each parameter value was then divided by the sum of the values to calculate the proportional weight of the parameter. The alcohol, drug and mental health indices were combined during this phase because they are components of one parameter. The drug index ratio was used for the calculation since the greatest variation occurred within the three drug problem classifications. The sum of the values was computed as 180.59. The ratio obtained for the instant offense parameter was 0.040 (7.28/180.59). Severity of the instant offense was therefore responsible for four percent of the total variation observed in the new parameters. Finally, the ratio was multiplied by 50 (upper point limit of the risk scale) to determine the number of risk points to be allocated to the parameter. The results of this analysis are summarized below.

<u>Parameter</u>	<u>Ratio Factor</u> (Value - 180.59)	<u>Risk Points</u> (Ratio Factor x 50)
Severity of the Instant Offense	0.040	2.02
Prior Criminal Record	0.266	13.29
Client Age	0.093	4.64
Extent of Education	0.142	7.09
Employment Related Activities	0.159	7.97
Alcohol, Drug* and/or Mental Health	0.177	8.87
Existing Family Structure	0.122	6.12

* Drug Classification used in the analysis

The "risk points" shown in the third column provided a foundation for designing the new weighted scoring system. The calculations show the appropriate number of risk score points to be allocated to each of the new parameters. Severity of the instant offense, for example, should be based on a range of two risk points. Likewise, the results suggest that the client education parameter can be rated from zero to seven points. The analysis therefore represents a theoretical upper limit of the range of points to be assigned to the risk parameters.

Unfortunately, the data failed to describe the appropriate distribution of risk points for the classifications contained within a given parameter. The evaluation team therefore designed a preliminary model based on the data described in Section 2.21 (comparisons of outcome rates for parameter and parameter classifications). Points were allocated in a discretionary fashion according to the outcome rates observed in the risk classification. For example, the prior criminal record index contained four revised classifications. Because the previous analysis suggested that the maximum score for the index should not exceed 13 points, the evaluation team assigned the 13 points to the class exhibiting the highest success rate, i.e., no prior record. Likewise, the group with the lowest success rates, seven or more prior convictions, were assigned zero points. Those convicted of 3-6 prior offenses were allocated four points since they were slightly more successful than the class with seven or more convictions. The remaining group, one to two prior convictions, were assigned ten points. Similar methods were employed to assign risk score points to the other six parameters.

To summarize, the evaluation team designed a preliminary model to accommodate the proposed modifications in the DCMB0 instrument. A baseline standard of client performance was calculated to determine the "weight" or total number of points to be distributed between the seven risk parameters. A final analysis was conducted to assign points to each classification within the risk parameters. A combination of objective tests and intuitive judgements provided the evaluation team with the basic information necessary to develop a more sophisticated model.

2.32 Computer Simulated Scoring Adjustments

Although a functional model of the revised DCMB0 instrument had been designed, the evaluation team was unable to validate the predictive accuracy of the new system. However, one of the major goals of the project was to implement a "streamlined" instrument capable of achieving the same risk predictive qualities of the original system. Traditional research methods suggest that the model could be evaluated only after several months of new intake and discharge data had been gathered for clients screened with the model instrument. Comparisons between intake risk scores and case outcome rates, similar to those conducted in Section 2.2, would then be utilized to assess the predictive accuracy of the model.

Fortunately, an alternative method was developed by the evaluation team. A sophisticated computer program was designed to simulate the impact of proposed modifications in the risk parameters and scoring systems. The Cohort I matched data base served as a sample population of probation clients during the test period. Matched cases which did not include the

mental health index because the client had been screened prior to July of 1978, (when the DCMB0 instrument was updated - refer to Section 2.21) were eliminated from this phase of the analysis. Therefore, all matched cases contained information categories compatible with the planned revisions. A grand total of 7,939 matched cases remained for the computer simulated tests.

Essentially, the program allowed an operator to "substitute" any new scores for each client contained in the sample. A series of trial and error experiments were conducted to determine the optimal distribution of risk score points between and within the seven new parameters.

The following scenario describes how these adjustments in the risk scores were accomplished. The researcher examined the severity of the instant offense parameter. According to the argument in Section 2.31, this parameter should have a range of only two risk score points. The researcher could, for example, assign two points to the classification rated as misdemeanor and one point to those rated as a felony conviction. The computer would then scan the Cohort I data base. Any clients who previously received scores of four, five or six points for the severity index (Class A - misdemeanor, Class B - misdemeanor, and Class C - misdemeanor, respectively) would now be assigned a score of two points. Likewise, clients would receive a new score of one point for the index if they were convicted of a felony offense (one, two, or three points from the original system). The new values were temporarily scored in the computer system file. The researcher would then proceed to the prior record index and substitute new scores in a similar fashion. Two reports

were produced once the researcher had completed the appropriate scoring modifications. One report described the relationship between the original risk predictive score and the proposed risk predictive score for clients who had been successfully terminated. The second report contained an identical analysis for the probationers who were considered failures. Display 24 shows a sample report from the analysis. According to the data, 57 clients received total scores of 32 points on both of the scoring instruments. However, 21 clients received a total score of 32 on the original system and 31 points on the experimental instrument. Total positive and negative deviations were also tallied by the computer to determine the magnitude of point shifts occurring for each risk point.

A supplemental report was also available to the researcher for analyzing the impact of the scoring changes on a case-by-case basis. Individual cases could be randomly accessed to provide further information on any given subset of the client population. This program also permitted a rapid evaluation of any scoring revisions between and within the parameters before submitting the plan to the entire data base.

The objective of the evaluation was to minimize the frequency of positive and negative changes in total risk scores between the two instruments. If both instruments consistently yielded similar total risk scores, the predictive qualities of the original DCMB0 instrument would remain intact. That is, the strong correlation between the total risk scores and case outcome rates would be preserved if the new format produced scores identical to the original instrument for a large group of clients. As an illustration, the group of clients who received 32 points

on the original instrument was likely to exhibit an 84 percent (average) success rate according to the data shown in Display 5. Regardless of the nature of any proposed modifications, the same group of clients could be expected to have an 84 percent success rate as long as the new instrument generated a score of 32 points.

In fact, the evaluation team hypothesized that the predictive abilities of the original instrument could be enhanced if the new model could increase the total risk score for successful clients and decrease the total risk score for clients considered to be failures. The added thrust would widen the gap in risk scores between successful and unsuccessful clients. Since the actual case outcomes for the Cohort I data base were known, this theory was easily applied during the experimental period.

Although the tests performed in Section 2.31 supplied the evaluation team with valuable reference data and a preliminary weighting system, a wide array of experiments were conducted with the computer simulated scoring programs. The evaluation team finally arrived at a new weighting system which incorporated the suggested modifications and maintained the qualities of the original instrument. The values assigned to each parameter and classification are listed below.

<u>Parameter</u>	<u>Risk Points</u>
Severity of the Instant Offense	
Misdemeanor	3
Felony	1

Prior Criminal Record	
No Prior Record	12
1 - 2 Priors (misd.)	9
3 - 6 Priors (misd.)	4
7 or more (misd.)	0
Client Age	
16 - 19 years	1
20 - 35 years	2
36 and older	4
Extent of Education	
8th, 9th, or 10th grade	1
11th or less than 8th grade	3
High School Graduate	5
Post High School Education	6
Employment Related Activities	
0 - 4 Months of Activity	1 (Full-time)
5 - 8 Months of Activity	4 (Full-time)
9 - 11 Months of Activity	5 (Full-time)
12 Months of Activity	7 (Full-time)
Alcohol, Drug and/or Mental Health Problems	
Serious Current Problem	0
Moderate/Minor Problem	4
No Problem	8

Existing Family Structure

Resides away from family with few or no ties	1
Resides away from family with some ties <u>or</u> resides in one parent home	4
Resides with Spouse <u>or</u> separated/ divorced but caring for/supporting children <u>or</u> resides in two parent home	6

Two scoring guidelines were implemented with the above modifications. First, in the alcohol, drug, and/or mental health index, the lowest score assigned to the three components serves as the final score for the parameter. A final score of zero can appear for the parameter only if one of the components is scored as zero or if problems exist in all three components. Secondly, part-time employment activity points were calculated by dividing the respective full time points by two. Thus, a part-time activity is equivalent to half of a corresponding full time activity score.

The upper range of risk score points assigned to each parameter were consistent with the values calculated for the preliminary model. Computer reports shown in Displays 25 and 26 describe the relationship between the new total risk scores and the original DCMB0 risk scores. Display 25 suggests that the new scores obtained for failure clients were generally compatible with the original scores. The second diagonal line represents identical scores obtained in both systems. The upper and lower lines

indicate a range of three point differences between the two scales. Very few cases were observed above or below the "bands." Likewise, Display 26 shows a similar comparison for successful clients. Although more cases fall above and below the range of compatible scores, the reader should be reminded that successful cases were far more frequent than failure cases.

The data presented in Display 27 shows the number of cases which experienced positive and negative point deviations from the original risk predictive score. For example, 4,442 or 55 percent of the 7,939 matched cases received higher scores with the new system. Of the 4,442 cases, 3,563 clients were successfully terminated while 879 were failure cases. As previously noted, it was desirable to add points to successful cases to further elevate their total risk scores. Fortunately, only 879 or less than 20 percent of the positive point changes were for clients considered unsuccessful.

For cases exhibiting a decrease in total risk points on the new scale, approximately 75 percent (1736) of the 2,291 cases were successful clients. Although a decrease in total risk scores was more desirable for failure case rather than success cases, the data indicates that very few successful clients lost more than four points on the new scoring system.

Finally, Display 27 suggests that 278 of the 1,712 matched failure cases received identical scores on both instruments. Likewise, 928 of the 6,227 matched success cases received the same total risk predictive scores.

In conclusion, the data supports the revised weighting scheme developed by the evaluation team. The new total risk scores are generally

consistent with those found in the original DCMB0 system. In many cases, successful clients "gained" additional points while failure clients "lost" points when they were scored on the revised weighting scale. Statistical techniques, discussed in the following section, were used to prove that the predictive qualities of the new scoring format closely resemble the initial DCMB0 instrument.

2.33 Evaluation of the Revised Scoring System

The evaluation team examined the relationship between the "revised" total risk scores and population outcome rates. The final outcome index again served as the criteria for describing client success and failure. Probationers released as "no conviction while on probation" were considered success cases while all others were defined as failures

Display 28 is a scattergraph diagram which illustrates the linear regression observed when the new risk scores were compared to client failure rates. As in the original DCMB0 index, the scattergraph suggests that a strong relationship exists between the total risk score and case outcome rates. That is, clients receiving a higher risk score were more likely to be discharged as a successful client than those assigned fewer points. The regression equation ($y = -1.944X + 85.22$) and the correlation coefficient at one point intervals (-0.965) provide further empirical evidence that the new risk scores are consistent with outcome rates. The correlation coefficient at two point blocked intervals increased to -0.983 as shown in Display 28.

Population failure rates were tested for equality across the full range of risk scores. The hypothesis that all population failure rates are equal to the mean failure rate (21.75%) was rejected ($\chi^2 = 934.41$;

d.f. = 37; $p < .001$ where upper limit of $\chi^2 = 7957$). The correlation coefficient at single point intervals (-0.965) suggests that approximately 93.1 percent ($r^2 = 0.931$) of the variation in population failure rates was attributed to the new risk scores. The results of these tests are summarized in Display 29 and the raw data is provided in Display 30.

Based on the statistical tests presented above, the evaluation team concluded that the proposed modifications can be implemented without significantly diminishing the predictive powers of the original DCMB0 instrument. The "streamlined" risk predictive instrument, presented in Display thirty-one, incorporates a wide variety of improvements designed to further enhance the probation officers ability to rapidly identify low risk clients and diagnose the high risk client's major problems and needs. Equally important, the remarkable predictive accuracy of the original instrument has been preserved.

2.4 Administrative Guideline Revisions

Although the revised scoring format closely resembles the original risk scale, Display 29 suggests that mean risk scores have increased by one point. A comparison with Display 4 reveals the following:

	<u>Mean Risk Score</u>	
	Original Scale	Revised Scale
Successful Cases	32.61	33.87
Failure Cases	25.12	26.58
Total Cases	31.04	32.30

Administrative policy guidelines outlined in Section 1.1 require probation officers to classify clients as "low risk" cases if the total risk score

exceeds 32 points. The subset of clients receiving 32 or fewer points at intake were considered "high-risk" cases. However, the revised scoring system is likely to add one risk score point, on the average, to each new referral's total risk score. COAP administrators therefore adjusted the low risk/high risk guidelines to reflect the increased risk scale. Hence, all probationers screened with the revised DCMB0 instrument are classified as "low risk" cases if the total risk score is 34 or more points while those receiving 33 or fewer points are defined as "high risk" clients.

An additional change was also implemented by COAP administrators and the probation officer advisory committee. The "final outcome index" was modified to accurately describe why probation supervision was unsuccessfully terminated. The original outcome categories used to explain violations of probation were considered ambiguous. The advisory committee therefore designed and implemented an improved index. A second outcome index was also developed for probationers designated as "Accelerated Rehabilitation" cases. (The Accelerated Rehabilitation Act in Connecticut provides for a program of pretrial probation for eligible first offenders.)

2.5 Implementation of the Improved Risk Screening System

A series of workshops were conducted at nine regional sites in March of 1981 to familiarize probation officers with the revised risk prediction instrument. Two four-hour sessions were held at each site to avoid understaffing the nearby field offices.

After a brief review of the new instrument, the evaluation team explained that revisions were necessary for the following reasons:

1. Elimination of confusing and redundant scoring classifications
2. Reduce the time required to screen new referrals
3. Incorporate the suggestions and modifications proposed by the probation staff during the first year evaluation study
4. Improvement of the final outcome (termination) descriptions

Each modification was then discussed in complete detail and new scoring guidelines were explained for the seven parameters. It was also explained that new total risk scores were comparable to the original scores. However, since the mean risk score was increased by one point, the probation officer was informed that the high risk-low risk cutoff point was elevated from 32 points to 33 points. Finally, the evaluation team discussed the changes in the final outcome indices for regular and accelerated rehabilitation clients.

Probation officers received copies of the revised risk prediction instrument and were asked to independently score six sample cases as a training exercise. Descriptions of the hypothetical clients were designed to test the officer's understanding of the new scoring guidelines. Each case was discussed at length to identify and resolve any scoring errors. A similar series of test cases were also distributed to evaluate the probation officer's ability to recognize appropriate discharge (or termination) indices.

Workshop sessions were concluded when each participant demonstrated a thorough knowledge of the scoring revisions and policy adjustments. Officers were instructed to begin screening all referrals with the new risk prediction instrument.

2.6 Summary and Conclusions

A wide array of statistical tests were employed to evaluate the predictive accuracy of the DCMB0 instrument during the two year study. A computerized data base was established to examine the relationship between the probationer's performance and the risk scores assigned during intake screening. The evaluation team found the risk predictive scores to be strongly correlated with client success and failure. Several minor revisions were introduced to further improve the efficiency of the instrument. Further tests revealed that the modified risk predictive instrument maintained the qualities of the original system and eliminated the redundancy and ambiguity found in many of the scoring parameters.

Although the concept of caseload classification via risk prediction is practiced in a variety of settings, the DCMB0 system must be recognized as a unique contribution to the social sciences. Empirical prediction can no longer be regarded as an ineffective attempt to forecast future behaviors. The unparalleled success of the DCMB0 program suggests that objective criteria can be a valuable supplement to the clinician's repertoire of diagnostic tools.

CHAPTER THREE: PROBATION CASELOAD MANAGEMENT PROGRAMS:

PRESCRIPTIONS FOR IMPLEMENTATION

Adult probation classification models and related automated caseload information systems have recently demonstrated significant managerial utility as well as research potential. The Connecticut program evaluation provides clear evidence that agencies pioneering in relatively sophisticated programs have realized substantial benefits by integrating new caseload management technology into the fabric of standard agency policy.

In spite of increasing national interest focusing on development and implementation of risk/needs classification and caseload management information systems, and strong endorsements by the national criminal justice institutions, probation administrators have generally remained hesitant to implement existing caseload classification/management technology.

The writer contends that two major obstacles have accounted for this inaction. The first of these obstacles consists of the technical problems related to research and development of valid and functionally reliable risk predictive models. As a result of recent advancements, however, a choice of useful and promising classification models is now available. A second major obstacle justifiably anticipated by administrators is the broad spectrum of reorganizational issues and related managerial problems encountered in the implementation of systematic caseload management programs.

This chapter explores a series of managerial issues and organizational forces believed to be related to successful program implementation. The following prescriptive format, intended to provide insight for the coordination of these forces and issues, is based on the writer's five years experience in Connecticut.

Three major assumptions underlie the prescriptive managerial recommendations to be presented:

- (1) Contrary to the traditionally acceptable axiom stating that man is guided by reason and accordingly will utilize some reasonable combination of empirical-rational thought and self-interest in determining need for changes in behavior, line and management probation staff are not likely to appreciate the new project's utility and merit as a managerial tool. Concern for general organizational benefits is clearly superseded by staff's legitimate concerns regarding personal and parochial interests.
- (2) Major reorganization, defined here as significant change close to the "operational heart" of the probation agency, is required for implementation of programs involving supervision specialization, systematic caseload classification/management or establishment of caseload information systems. The more program related change required of probation staff in terms of revisions in routine duties and additional everyday activities, the more stress, resistance and hostility are likely to be encountered. As reorganization affects basic and disruptive change in staff's routine activities and duties, successful implementation requires extensive planning, training and coordination designed to anticipate, understand and minimize staff's resistance to the change process.

- (3) Success in program implementation is critically dependent upon the project coordinator's understanding and proper utilization of a series of dynamic organizational forces and managerial issues. A discussion of these forces and issues, which are entirely divorced from the project's real utility and conceptual merit, is the product of this paper.

In an attempt to provide the reader with practical information and insight into these implementation issues, each of seven prescriptions is presented and discussed individually.

Solicit and Use Staff Input and Participation

A process of participative planning and staff involvement is a highly desirable and important factor in the design and implementation of a new caseload classification project. At the point which administration assumes a strong interest in or reaches a decision (or receives a mandate) to adopt or develop a classification program, a sizable advisory committee should be formed immediately. This committee should include a representative cross-section of agency staff, including line staff. The initial task of the committee is to identify and document basic and specific problems inherent in the existing probation supervision system. Through a careful prioritization of this personalized list of case management problems, e.g. unmanageably large caseloads, insufficient community-based resources, increasing use of probation by the courts for the supervision of high risk offenders, etc., the group can be expected to

establish the need for changes and improvements. It is essential that the committee actively participates in the determination that sufficient need exists to justify a program of planned change. The committee must also take part in the formulation of specific and measurable caseload classification/management program objectives.

When the committee has identified existing problems, established need for change, and prioritized a list of objectives for the new program it is prepared to address the question of whether to adopt an existing program with some minor modifications to meet agency guidelines and standards or whether to consider a more ambitious approach involving research and development of a unique and ideal system designed and tailored specifically for the needs and goals of the particular agency.

Following a great deal of research, debate and advisement the committee must reach a consensus concerning one general model or approach to caseload classification/management. At the point which this choice is made the initial and most important task of the advisory committee has been accomplished. However, the group should continue to convene periodically to provide valuable input and feedback concerning key decisions, policy changes and various further program developments and refinements.

The importance of line and middle management staff participation and investment in this initial stage of program planning cannot be over-emphasized. This participative process, although painfully slower and considerably more demanding than the traditional unilateral (planned by management) technique, increases the likelihood that the new program

will, in fact, address the real needs of the agency as perceived by staff. At the same time, the participative planning process functions to gain the involvement and commitment of several key staff members during the early stages of program conceptualization.

Procure and Maximize Administrative Support

Strong and unified administrative support is another essential ingredient for successful program implementation, especially for controversial programs introducing substantial change. As probation staff are likely to be influenced by their perception of management's endorsement of the fledgling program, the program coordinator is likely to increase the probability of program success by understanding and capitalizing on this factor.

Staff are acutely aware of the extent to which the agency's chief executive supports or does not support the new program. Staff tend to assess the director's enthusiasm concerning project prospects and potential in terms of the extent to which he is willing to participate and share in the risk taking involved in the implementation of the new program. A sharing of this risk is indicated by genuine interest, enthusiasm and support, whereas reduced ownership and total delegation of program responsibility to the program coordinator is quickly perceived by staff as weak or insincere endorsement. It is the coordinator's responsibility to introduce and discuss this issue with the director and other top administrators.

Procurement of upper and middle management support is considered critical. At some early point in the reorganizational process the project coordinator must be able to assist agency managers to internalize the new program as a positive strategy to achieve their perceived probation supervision goals for the agency. Managers also have a strong inclination to resist newfangled methods primarily due to the general disruption and new tasks they tend to create. Initially, managers will view the caseload management system as a superficial scientific adjunct to the "real operation" or mission of the agency. In order to "buy-in" and encourage managers to genuinely endorse the program, thereby positively influencing their local staff, the program coordinator's effort is well invested in educating and "selling" this group at the planning stage prior to line staff orientation and program training.

Another factor which is judged in staff's assessment of administrative endorsement is the new program coordinator's ability to engage the participation of management in effectively and fairly enforcing program related directives. In Connecticut a small minority of staff tested management to learn the consequences of noncompliance. In this situation the program coordinator must be able to detect noncompliance (such as failure to conduct thorough and accurate screenings) immediately. He must also be prepared to react quickly either through, or with the support and assistance of, local managers. It is essential to include middle managers in advance planning and preparation of action plans for this contingency during the planning and early implementation phase of the program. It is also extremely important that the project coordinator does not

overreact to this initial "testing" behavior. Instead, he should consider this behavior as a normal reaction to change.

This "testing phenomenon" actually provides a positive byproduct as it enables the project coordinator to identify problem individuals and pockets of significant resistance early into the implementation phase of the program. The coordinator can then anticipate further testing and/or noncompliance from this same group immediately following the implementation of later program directives.

A final issue to be addressed as a component of administrative endorsement is staff's perception of the duration of the project. As reorganizational projects are often tied to finite terms of federal financial assistance, staff may assume the new project is a temporary experiment, that possibly after the funding cycle has terminated the agency will revert to the "old way." This logic can result in behavior intended to humor the project coordinator with some minimal level of program compliance until the funding cycle is over and "the storm has passed." In order to prevent this type of behavior it is upper management's responsibility to declare the utility and success of the project as an aid in the accomplishment of the agency's mission and to state definitively, as early as possible, that the project is "here to stay" regardless of the future availability of special financial assistance.

Acknowledge and Attend to Staff Resistance

Staff reaction to significant organizational change should be a critical consideration in the design and implementation of training for

new probation programs. The degree to which staff perceive a new program as having impact on their daily routine and long established personal work habits appears directly related to the level of stress and resistance generated. Stress, fear, resentment and overt hostility generated by program related change provide significant obstructions to program training and subsequent implementation.

Management and minimization of staff's resistance to change requires an understanding and acceptance of this natural reaction. Significant change in any human organization involves reapportionment of patterns of power, status and values. Change, as required for the implementation of systematic caseload management programs, typically involves some risk and stress for most members of the organization.

As change pervades the organization some staff will benefit and others will lose. Essentially it is this required exposure and vulnerability to risk that staff fear and resent most. More specifically, some line staff fear that a personal inadequacy may be uncovered by the new more standardized system. Some line managers are threatened by the program coordinator's new role and status as "expert caseload manager." They are inclined to feel this role may detract from their current status or reflect unfavorably on their past performance. Others are resentful of the program's effect on centralizing and upgrading accountability for the case management function. Some staff are openly hostile concerning the paperwork requirements involved in risk screening and needs assessment functions. Other staff simply possess a generally low tolerance for any job related change. Essentially, the program coordinator must be able to

identify, understand and work through several different sources of resistance in order to effectively reduce and overcome it.

Complicating this issue further is the fact that many individuals are unwilling or unable to verbalize feelings of hostility and resentment with administrators and even with the project coordinator. More often staff are inclined to engage in an indirect strategy of passive resistance characterized by their failure to become seriously involved during program training. Consequently, they can fail to learn functional program details and may actually be unable to comply with project instructions and guidelines when implementation occurs. A major part of this problem is attributed to simple avoidance of what staff view as negative and disruptive change, similar to normal procrastination. A more problematic situation occurs, however, if staff are permitted to set up serious emotional blockages and thereby fail to internalize the basic objectives and strategies of the new program.

Staff resistance to program related change cannot be ignored, denied or underestimated. The project coordinator or trainer must identify, accept and deal directly with stress and resistance in order to separate the underlying emotional issues from the pragmatic portion of the training curriculum. Anticipating and managing this issue of resistance as a legitimate component of program training serves a two-fold purpose. First, training sessions can provide an ideal forum where the natural stress caused by change can be attended to, discussed and in most cases reduced. Initially, staff tend to feel that program planners and coordinators are insensitive to personal concerns and issues. The

trainer/coordinator must make a special effort to explore and understand these emotionally charged issues and to admit openly that change does have some disruptive qualities and that it may also require some difficult trade-offs. Secondly, after the air has been cleared of these stress and resistance issues, the group is better prepared to learn the skills and information required to implement the new program.

Understand Line Perspectives

A key component of the larger issue of staff resistance is staff's perception of the program's effect on standards and policies regulating job performance expectations. Although administrative and line program objectives for caseload management are relatively compatible, e.g. improved client services and more manageable and realistic officer workloads, one must anticipate substantial disagreement regarding the value and purpose of program policies regulating classification and supervision process activities. Significant value discrepancies are likely to occur concerning program strategies intended to upgrade and promote uniformity in these probation process activities. Program standards regulating differential client supervision contact rates, risk screening interviewing quality, casenote recording and related casebook evaluation procedures are not easily accepted by line staff.

The administrative caseload management goal is to standardize process activities and improve accountability by means of a performance measurement strategy. This measurement strategy is expected to produce a performance increase in areas of substandard productivity and to thereby

affect a general improvement in overall agency productivity. Line and first level management staff are likely to perceive increased standardization and related performance guidelines primarily as an encroachment of their power of discretion in these duties and as a strategy intended to upgrade or increase overall job performance standards. Although line and management generally share the expectation that systematic caseload management will, in fact, improve overall probation supervision effectiveness, a serious discrepancy develops, however, as management claims the system itself will contribute to better case management while staff are inclined to believe that system demands for increased effort on their part will contribute to this same desired end.

This problem was compounded in Connecticut by the two year formal evaluation process which required staff knowledge of classification and supervision process objectives (performance standards) and performance measures. Examples of process objectives included client contact frequency rates, mandatory supervision plans and contracts, and a time limit imposed for completion and submission of risk screening forms. Examples of performance measurement procedures included standardized quarterly casebook audits, risk screening reliability testing and closed case file data reviews. Probation staff quickly and understandably concluded that increased client contact objectives, related casework audits and computerized client outcome rates were primarily intended to increase performance accountability rather than to achieve the original utilitarian program objectives. Some examples of line perspectives of project impact on increased performance expectations are as follows:

Some staff in Connecticut tended to view client contact standards as arbitrary and unrealistic administrative quotas rather than as performance goals or guidelines. These staff believed that local conditions and varying workload dictated reasonable performance and that any managerially derived objectives were entirely artificial. Uniform standards, (which must be slightly high to be useful), could not always be maintained and, consequently, a good deal of stress and related resentment was generated from staff performing below the suggested guidelines.

Another significant group of staff claimed that uniform program standards and guidelines merely provided a formalized package describing standards and objectives which they had informally utilized for years. Consequently, they felt the program not only failed to provide a novel and useful approach to caseload management, but served only to introduce a demoralizing collection of unnecessary rules and regulations which actually reduced officer motivation and discouraged individual discretion and innovation.

Risk/needs assessment standardization and related guidelines and definitions, intended to promote casework uniformity, appear extremely threatening for individuals who are already painfully aware of their substandard performance or motivation. These individuals are likely to disguise this rational but revealing perception of the program by presenting any number of baffling or irrational diversionary arguments and complaints.

The scope and importance of this issue of conflicting perspectives regarding performance measurement and program evaluation cannot be overstated. System evaluation immediately translated into job performance evaluation in the ears of many probation staff. In order to deal with this issue of conflicting perspectives, the program coordinator must first be aware that these conflicts do, in fact, exist. He must also be able to appreciate the viewpoint and understand the vulnerability of line staff. Most importantly, he must then deal with this conflict in an honest and open manner. In essence, systematic caseload management certainly does increase accountability by improving management's knowledge relative to individual job performance. However, system improvements are to be realized by focusing on individual areas of substandard productivity, rather than by demanding generally increased performance of all staff.

Implement a Program Monitoring System

Systematic program monitoring, designed to measure the extent of staff cooperation and compliance in the timely accomplishment of critical

project tasks, is essential to ensure the initial implementation success of a new caseload management project. This point is of special importance for relatively large or statewide probation agencies such as Connecticut, where all line managers were not able to immediately internalize program goals during orientation and training. The project coordinator must be able to determine to what extent individual staff members are complying with key program directives, especially immediately following program start-up.

As some "testing behavior" is to be expected, the coordinator's task is to identify and correct this behavior as quickly as possible. Screening accountability may be built into a case classification program through use of a multi-copy screening instrument. One copy of the completed intake screening form and later a discharge screening copy, is collected centrally and monitored by program staff.

Central collection and monitoring of screening data accomplishes three important purposes. First, the project manager can determine whether each user (probation officer) has conducted a screening for each new referral by comparing the number of completed screening forms with the number of new supervision referrals assigned for any given month. Later, at discharge from probation, client rescreening and re-evaluation can be monitored in a similar fashion. Second, central collection enables the monitor to detect obvious errors and omissions. A quality control operation is unpopular with some staff but it functions to provide specific and immediate feedback to the screener (probation officer)

concerning the source of screening errors or omissions. Over a period of months, these first two operations communicate to staff the high priority assigned to timely and accurate risk/needs screening.

After some period of feedback, continued in-service training and possibly some situations requiring personal confrontations with staff on the part of the project coordinator, monitoring results will indicate stable and acceptable rates of quality and submission. At this point staff have learned the required screening skills and have fully integrated the screening task with routine duties. Consequently, the monitoring operation should be discontinued or delegated to local line supervisors.

The third and extremely significant advantage of central collection of screening data is that it facilitates easy access to this data for computer entry for various managerial, evaluative and research studies.

Build in Program Incentives for Staff

The Connecticut experience strongly suggests that lofty and utilitarian program goals such as "improved probation supervision services" and "a more efficient agency function" do not provide sufficient motivation or incentive to overcome the disruptive effects of change. Real incentives responding directly and positively to such blunt staff inquiries as "What's in this for me?" must be considered and built into the caseload management program.

Obviously public sector incentives, especially financial incentives, are extremely difficult to provide. However, useful incentives are available and the program coordinator's effort is well spent in identifying them and maximizing their utility.

Although a series of useful minor incentives, which are not discussed here, can be built into the program, two major and obvious incentives should be carefully developed and presented very early into the program. These incentives are (1) supervision workload reduction for line staff and (2) substantially improved managerial information for administrative planners and decision makers. In Connecticut, agency policy requiring little or no intervention for low risk supervision cases enabled officers to cut actively supervised caseloads by 25% and automated screening data enabled the program coordinator to provide comprehensive and detailed managerial reports describing client risk, characteristics and needs profiles for each of the agency's 29 field supervision teams.

Aside from the fact that these benefits are powerful "resistance reducers" and should be fully developed and utilized in promoting the program, it is also important for the program coordinator to clearly demonstrate the real and positive impact these benefits produce as quickly as possible following the point of program start-up. For line staff this means providing immediate feedback in the form of graphs and charts dramatically depicting program impact on caseload and resultant workload reduction. Quick payoff from the managerial perspective can be achieved by producing a "Probationer Profile at Intake Report" as early as six months into the program, rather than producing a more comprehensive and refined annual report after twelve or more months. These real and immediate payoffs should be well documented and publicized as they are perhaps the program coordinator's most positive and powerful tools to reduce resistance and gain program acceptance.

Integrate the New Program with Agency Policy

For various reasons discussed previously, staff, including management, tend initially to isolate new and controversial case management program policy from what they view as the traditional "nuts and bolts" policies of the probation supervision operation. In essence, however, the new program policy is the "new set of nuts and bolts" and, accordingly, it is the coordinator's primary goal to enable staff to perceive program policy as the official strategy by which the agency can achieve its supervision goals.

At some point in the project, agency staff should conduct an informal evaluation to decide whether the program has met its original administrative goals and at the same time, has satisfied line staff expectations. Approximately six months to one year into the program, ideally following publication of the first managerial report and documentation of significant workload reduction, a participative agency decision should be made concerning the merit and permanence of the program. If the decision is positive, to continue the project, a formal memorandum indicating such from the chief executive should be distributed to all staff. This strategy serves to squelch rumors and feelings that the program is temporary or unsuccessful. It also provides a basis for agency policy makers to initiate the task of formally integrating program policy with basic agency policy. This task requires rewriting the entire chapter of the Operational Manual dealing with guidelines for probation supervision. For agencies lacking an operational manual, a formal, detailed policy statement will serve to designate and integrate the "new program" as official agency policy.

Revised policy accommodating and including caseload management guidelines and directives represents clear evidence of implementation success. However, conclusive evidence of program success can only be obtained and documented through the formal program evaluation process. It is important that program success be measured in terms of staff's attitudinal acceptance and behavioral program compliance as well as in terms of achievement of program goals and objectives pertaining to improvement in probation services.

SUMMARY

The benefits provided by systematic caseload management programs become increasingly obvious and more appealing as related technology improves and as agencies react in a national climate of frugality and shrinking resources. Significant organizational change, however, as required for the implementation of these programs poses a number of interesting challenges. Consequently, basic managerial skills and a good deal of energy and commitment are required to overcome the inertia associated with traditional probation methods and the friction created by staff resistance. Hopefully, the prescriptive managerial recommendations presented here will provide encouragement and assistance for probation managers contemplating implementation of these much needed programs.

CHAPTER FOUR: A SERIES OF TABLES REPRESENTING MANAGERIAL DATA AND TESTS CONDUCTED DURING THE EVALUATION PROJECT

SUCCESS RATES REPORTED BY PROBATION OFFICES
(FOR ALL RISK SCORES)

OFFICE	TOTAL CASES	TOTAL SUCCESS	% SUCCESS	TOTAL FAILURE	% FAILURE
Danielson	209	154	73.7	55	26.3
Manchester	824	689	83.6	135	16.4
Middletown	487	402	82.5	85	17.4
New London	664	471	70.9	193	29.1
Norwich	458	339	74.0	119	26.0
Willimantic	242	173	71.5	69	28.5
District I	2884	2228	77.3	656	22.7
Bristol	610	514	84.3	96	15.7
Enfield	483	388	80.3	95	19.7
New Britain	651	572	87.9	79	12.1
Torrington	297	248	83.5	49	16.5
Hartford	1593	1281	80.4	312	19.6
Fennessy	282	231	81.9	51	18.1
Santese	286	221	77.3	65	22.7
Phelan	395	331	83.8	64	16.2
Bavier	321	251	78.2	70	21.8
Cutler	309	247	79.9	62	20.1
District II	3634	3003	82.6	631	17.4
Danbury	705	620	87.9	85	12.1
Norwalk	642	500	77.9	142	22.1
Stamford	746	608	81.5	138	18.5
Bridgeport	1723	1374	79.7	349	20.3
Cooluris	400	313	78.2	87	21.8
Jaundrill	445	358	80.4	87	19.6
Trombley	407	333	81.8	74	18.2
Rodgers	471	370	78.6	101	21.4
District III	3816	3102	81.3	714	18.7
Waterbury	762	591	77.6	171	22.4
Ansonia/Milfd	674	539	80.0	135	20.0
Meriden	586	473	80.7	113	19.3
New Haven	1933	1379	71.3	554	28.7
Rizzutti	551	336	61.0	215	39.0
Ensling	504	365	72.4	139	27.6
Postman	344	247	71.8	97	28.2
Pesanelli	534	431	80.7	103	19.3
District IV	3955	2982	75.4	973	24.6
Statewide	14,300	11,356	79.4	2,944	20.6

SUCCESS RATES FOR EACH PROBATION OFFICE
(FOR HIGH RISK 1-32 POINTS)

OFFICE	TOTAL CASES	TOTAL SUCCESS	% SUCCESS	TOTAL FAILURE	% FAILURE
Danielson	104	65	62.5	39	37.5
Manchester	350	251	71.7	99	28.3
Middletown	207	153	73.9	54	26.1
New London	345	200	58.0	145	42.0
Norwich	267	172	64.4	95	35.6
Willimantic	136	80	58.8	56	41.2
District I	1409	921	65.3	488	34.6
Bristol	224	165	73.7	59	26.3
Enfield	186	121	65.1	65	34.9
New Britain	240	191	79.6	49	20.4
Torrington	160	124	77.5	36	22.5
Hartford	856	617	72.1	239	27.9
Fennessy	154	115	74.7	39	25.3
Santese	149	99	66.4	50	33.6
Phelan	218	173	79.4	45	20.6
Bavier	173	118	68.2	55	31.8
Cutler	162	112	69.1	50	30.9
District II	1666	1218	73.1	448	26.9
Danbury	232	185	79.7	47	20.3
Norwalk	290	194	66.9	96	33.1
Stamford	347	242	69.7	105	30.3
Bridgeport	891	628	70.5	263	29.5
Cooluris	218	151	69.3	67	30.7
Jaundrill	201	144	71.6	57	28.4
Trombley	213	157	73.7	56	26.3
Rodgers	259	176	68.0	83	32.0
District III	1760	1249	71.0	511	29.0
Waterbury	390	259	66.4	131	33.6
Ansonia/Milfd	263	165	62.7	98	37.3
Meriden	270	193	71.5	77	28.5
New Haven	1105	689	62.4	416	37.6
Rizzutti	319	176	55.2	143	44.8
Ensling	309	193	62.5	116	37.5
Postman	209	131	62.7	78	37.3
Pesanelli	268	189	70.5	79	29.5
District IV	2028	1306	64.4	722	35.6
Statewide	6,863	4,694	68.4	2,169	31.6

TOTAL RISK SCORE POINT DISTRIBUTION
BY PROBATION OFFICE (A.R. CASES EXCLUDED)
TOTAL RISK SCORE

PROBATION OFFICE	MEAN RISK SCORE	% 1-5	% 6-10	% 11-15	% 16-20	% 21-25	% 26-30	% 31-35	% 36-40	% 41-45	% 46+
Danielson	29.1	--	1.4	5.1	4.8	8.9	18.0	35.3	24.5	1.9	--
Manchester	30.9	--	1.0	2.2	6.4	8.6	14.6	25.5	29.6	11.0	1.2
Middletown	31.3	0.2	1.8	2.6	4.2	7.2	17.0	25.8	27.2	13.2	0.4
Willimantic	28.9	--	2.0	7.2	7.5	12.6	18.1	25.3	20.4	6.1	0.4
Norwich	28.4	0.4	2.0	5.7	10.8	10.3	17.1	25.6	22.3	5.4	--
New London	28.6	0.1	2.0	4.3	7.5	14.1	15.6	26.4	24.6	4.8	0.4
DISTRICT I	29.5	0.1	1.7	4.5	6.9	10.3	16.7	27.3	24.8	7.1	0.4
Enfield	32.4	--	1.0	1.4	4.8	9.0	13.6	28.5	31.6	8.6	1.2
Torrington	29.4	0.3	4.6	4.3	7.3	9.3	16.5	31.0	20.5	6.3	--
Bristol	32.8	--	1.0	1.9	3.5	7.0	15.4	31.1	33.1	6.5	0.6
New Britain	33.6	0.2	0.4	2.9	4.6	7.2	14.3	25.8	31.7	12.0	1.3
Hartford	30.1	0.2	1.6	5.3	8.4	10.8	17.7	27.5	21.4	6.3	0.7
Fennessy	30.2	--	1.0	3.1	8.5	15.0	16.7	26.9	23.8	4.8	0.3
Santese	29.5	--	2.0	5.4	9.8	7.9	18.2	28.3	22.5	5.5	0.3
Phelan	30.1	0.5	1.2	6.0	6.8	13.3	18.8	27.5	19.3	6.0	0.8
Bavier	30.2	0.3	2.2	6.2	8.1	8.7	17.7	27.3	18.3	10.2	0.9
Cutler	30.3	0.3	1.6	5.7	8.9	9.2	17.2	27.4	23.2	5.1	1.3
DISTRICT II	30.9	0.2	1.7	4.1	6.9	9.6	16.5	28.2	24.9	7.2	0.7
Danbury	34.2	--	0.2	1.5	3.2	6.4	13.9	27.9	33.5	12.6	0.6
Stamford	31.1	0.1	1.6	4.8	5.9	10.1	15.1	24.4	27.0	10.4	0.5
Norwalk	31.0	--	1.7	2.8	5.1	9.2	16.0	30.5	28.6	5.5	0.6
Bridgeport	29.9	0.2	1.6	4.6	6.9	9.9	18.1	27.1	24.1	7.3	0.2
Cooluris	30.1	--	1.7	3.5	7.0	11.2	17.4	30.8	23.4	4.5	0.5
Jaundrill	30.6	0.4	0.2	2.2	4.4	8.9	18.9	28.2	27.1	9.6	--
Trombley	29.6	0.2	2.0	5.6	8.1	9.1	19.4	23.3	25.2	7.1	--
Rodgers	29.2	0.2	2.3	7.3	8.0	10.5	17.0	26.0	20.6	7.8	0.2
DISTRICT III	30.8	0.1	1.4	4.0	5.9	9.3	16.8	27.3	26.5	8.2	0.3
Waterbury	30.1	0.4	2.7	5.9	8.3	10.6	15.6	24.3	25.7	5.9	0.6
Ansonia-Milford	32.3	--	1.0	2.9	5.9	8.4	12.7	25.0	31.9	10.9	1.0
Meriden	30.9	--	1.4	3.9	5.4	8.6	17.9	23.3	26.7	11.5	1.4
North Haven	28.7	0.1	3.1	7.3	9.6	11.4	17.2	22.5	22.2	6.4	0.3
Rizzutti	29.0	--	2.1	7.8	10.9	11.7	17.7	19.2	24.9	5.6	--
Ensling	27.9	0.2	3.9	10.5	10.3	14.1	14.7	19.0	19.6	7.0	0.8
Postman	28.9	--	2.8	6.3	9.7	9.7	21.6	24.4	21.6	4.0	--
Pesanelli	29.1	--	3.5	4.7	7.6	10.1	14.9	27.4	22.8	8.8	0.2
DISTRICT IV	29.7	0.1	2.5	6.0	8.3	10.5	16.4	23.2	24.7	7.7	0.6
STATEWIDE	30.2	0.1	1.8	4.6	7.0	9.9	16.6	26.5	25.2	7.5	0.5

CONCLUSION: Over fifty percent of the convicted or adjudicated probationers screened in many offices receive a total risk score ranging from 31 to 40 points. Few clients receive more than 45 points or less than 10 points during intake screening.

MODEL DISTRIBUTION AMONG PROBATION OFFICES

<u>OFFICE</u>	<u>TOTAL CASES</u>	<u># MODEL I</u>	<u>% MODEL I</u>	<u># MODEL II</u>	<u>% MODEL</u>	<u># MODEL</u>	<u>% MODEL III</u>
Danielson	192	46	24.0	135	70.3	11	5.7
Manchester	674	212	31.5	284	42.1	178	26.4
Middletown	404	91	22.5	142	35.1	171	42.3
New London	576	97	16.8	430	74.7	49	8.5
Norwich	384	107	27.9	242	63.0	35	9.1
Willimantic	215	57	26.5	137	63.7	21	9.8
DISTRICT I	2445	610	24.9	1370	56.0	465	19.0
Bristol	489	213	43.6	273	55.8	3	0.6
Enfield	411	118	28.7	282	68.6	11	2.7
New Britain	552	180	32.6	299	54.2	73	13.2
Torrington	232	57	24.6	156	67.2	19	8.2
Hartford	1362	383	28.1	789	57.9	190	14.0
Fennessy	252	56	22.2	154	61.1	42	16.7
Santese	275	75	27.3	149	54.2	51	18.5
Phelan	330	107	32.4	168	50.9	55	16.7
Bavier	257	65	25.3	174	67.7	18	7.0
Cutler	248	80	32.3	144	58.1	24	9.7
DISTRICT II	3,046	951	31.2	1,799	59.1	296	9.7
Danbury	585	243	41.5	129	22.1	213	36.4
Norwalk	548	234	42.7	217	39.6	100	18.2
Stamford	637	235	36.9	356	55.9	46	7.2
Bridgeport	1425	406	28.5	862	60.5	155	10.9
Cooluris	317	73	23.0	214	67.5	28	8.8
Jaundrill	375	110	29.3	218	58.1	47	12.5
Trombley	313	106	33.9	152	48.6	55	17.6
Rodgers	420	117	27.9	278	66.2	25	6.0
DISTRICT III	3,195	1,118	35.0	1,504	49.0	514	16.1
Waterbury	658	167	25.4	413	62.8	78	11.9
Ansonia/Milford	569	237	41.7	318	55.9	14	2.5
Meriden	512	165	32.2	261	51.0	86	16.8
New Haven	1584	314	19.8	1116	70.5	154	9.7
Rizzutti	463	123	26.6	299	64.6	41	8.9
Ensling	395	69	17.5	299	75.7	27	6.8
Postman	295	46	15.6	185	62.7	64	21.7
Pesanelli	431	76	17.6	333	77.3	22	5.1
DISTRICT IV	3,323	883	26.6	2,108	63.4	332	10.0
STATEWIDE	12,010	3,562	29.7	6,841	57.0	1,607	13.4

BEAI ADJUSTMENT SCORES IN EDUCATION AND EMPLOYMENT ACTIVITY
FOR EACH PROBATION OFFICE

OFFICE (For 16-19 yr. old probationers only)	E D U C A T I O N				E M P L O Y M E N T					
	NO CHANGE	%NO CHANGE	INCREASE	% INCREASE	DECREASE	% DECREASE	NO CHANGE	%NO CHANGE	INCREASE	% INCREASE
Danielson	98	94.2	6	5.8	18	9.0	146	73.4	35	17.6
Manchester	265	83.1	54	16.9	51	6.8	601	79.9	100	13.3
Middletown	147	78.2	41	21.8	40	9.0	327	73.6	77	17.3
New London	206	79.8	52	20.2	42	6.8	476	76.5	104	16.7
Norwich	165	85.1	29	14.9	40	9.5	316	74.7	67	15.8
Willimantic	102	85.0	18	15.0	31	13.5	165	71.7	34	14.8
District I	983	83.1	200	16.9	222	8.3	2031	76.1	417	15.6
Bristol	214	84.6	39	15.4	54	9.4	421	73.5	98	17.1
Enfield	135	70.7	56	29.3	26	5.8	340	76.2	80	17.9
New Britain	208	89.7	24	10.3	27	4.3	549	88.0	48	7.7
Torrington	93	77.5	27	22.5	21	7.7	199	72.9	53	19.4
Hartford	397	85.6	67	14.3	83	6.0	1115	81.1	176	12.8
Fennessy	55	76.4	17	23.6	11	4.3	204	80.0	40	15.7
Santese	59	76.6	18	23.4	8	3.5	180	79.3	39	17.2
Phelan	109	88.6	14	11.4	22	6.3	300	85.2	30	8.5
Bavier	80	89.9	9	10.1	27	9.3	229	78.7	35	12.0
Cutler	94	91.3	9	8.7	15	6.0	202	81.1	32	12.9
District II	1047	83.1	213	16.9	211	6.4	2624	79.8	455	13.8
Danbury	238	75.8	76	24.2	50	7.1	574	81.7	79	11.2
Norwalk	155	69.8	67	30.2	51	8.5	450	75.1	98	16.4
Stamford	181	78.7	49	21.3	51	7.2	563	80.1	89	12.7
Bridgeport	483	82.8	100	17.2	136	8.4	1254	77.6	225	13.9
Cooluris	129	84.3	24	15.7	36	9.6	283	75.9	54	14.5
Jaundrill	114	79.2	30	20.8	26	6.3	355	85.5	34	8.2
Trombley	106	88.3	14	11.7	30	8.1	275	74.1	66	17.8
Rodgers	134	80.7	32	19.3	44	9.6	341	74.8	71	15.6
District III	1057	78.3	292	21.6	288	7.9	2841	78.5	491	13.6
Waterbury	212	80.6	51	19.4	44	6.1	593	82.6	81	11.3
Ansonia/Mlfd	231	81.9	76	26.9	47	7.3	512	79.8	83	12.9
Meriden	218	86.2	35	13.8	32	5.6	494	86.2	47	8.2
New Haven	596	85.4	102	14.6	133	7.4	1463	80.9	212	11.7
Rizzutti	173	88.7	22	11.3	36	7.0	444	86.0	36	7.0
Ensling	124	74.7	42	25.3	30	6.5	347	75.6	82	17.9
Postman	118	80.8	28	19.2	25	8.0	240	76.7	48	15.3
Pesanelli	181	94.8	10	5.2	42	8.1	432	83.1	46	8.8
District IV	1257	82.6	264	17.4	256	6.8	3062	81.8	423	11.3
Statewide	4,344	81.8	969	18.2	977	7.3	10,558	79.3	1,786	13.4

BEAI ADJUSTMENT SCORES IN DRUG, ALCOHOL, MENTAL HEALTH
AND FAMILY STRUCTURE FOR EACH PROBATION OFFICE

OFFICE	DRUGS, ALCOHOL, MENTAL HEALTH						FAMILY STRUCTURE					
	%		NO	%NO	%		%		NO	%NO	%	
	DECREASE	DECREASE	CHANGE	CHANGE	INCREASE	INCREASE	DECREASE	DECREASE	CHANGE	CHANGE	INCREASE	INCREASE
Danielson	24	12.1	101	50.1	74	37.2	17	8.5	172	86.4	10	5.0
Manchester	82	10.9	440	58.5	230	30.6	49	6.5	655	87.1	48	6.4
Middletown	80	18.0	228	51.3	136	30.6	38	8.6	373	84.0	33	7.4
New London	66	10.6	332	53.4	224	36.0	66	10.6	498	80.1	58	9.3
Norwich	78	18.4	205	48.4	140	33.1	61	14.4	308	72.8	54	12.8
Willimantic	61	26.5	88	38.3	81	35.2	32	13.9	176	76.5	22	9.7
District I	391	14.6	1394	52.2	885	33.1	263	9.8	2182	81.7	225	8.4
Bristol	86	15.0	328	57.2	159	27.7	56	9.8	497	86.7	20	3.5
Enfield	52	11.6	263	59.0	131	29.4	31	6.9	392	87.9	23	5.2
New Britain	61	9.8	458	73.4	105	16.8	23	3.7	586	93.9	15	2.4
Torrington	31	11.4	181	66.3	61	22.3	19	6.9	238	87.2	16	5.9
Hartford	245	17.8	748	54.4	381	27.7	94	6.8	1171	85.2	109	7.9
Fennessy	38	14.9	150	58.8	67	26.3	21	8.2	210	82.3	24	9.4
Santese	57	25.1	90	39.6	80	35.2	9	4.0	190	83.7	28	12.3
Phelan	55	15.6	209	59.4	88	25.0	24	6.8	309	87.8	19	5.4
Bavier	46	15.8	154	52.9	91	31.3	27	9.3	246	84.5	18	6.2
Cutler	49	19.7	145	58.2	55	22.1	13	5.2	216	86.7	20	8.0
District II	475	14.4	1978	60.1	837	25.4	223	6.8	2884	87.6	183	5.6
Danbury	53	7.5	391	55.6	259	36.8	49	7.0	621	88.3	33	4.7
Norwalk	73	12.2	299	49.9	227	37.9	42	7.0	521	87.0	36	6.0
Stamford	104	14.8	430	61.2	169	24.0	52	7.4	614	87.3	37	5.3
Bridgeport	179	11.1	924	57.2	512	31.7	97	6.0	1426	88.3	92	5.7
Cooluris	44	11.8	216	57.9	113	30.3	24	6.4	321	86.0	28	7.5
Jaundrill	50	12.0	259	62.4	106	25.5	21	5.1	379	91.3	15	3.6
Trombley	32	8.6	207	55.8	132	35.6	25	6.7	329	88.7	17	4.6
Rodgers	53	11.6	242	53.1	161	35.3	27	5.9	397	87.1	32	7.0
District III	409	11.3	2044	56.5	1167	32.2	240	6.6	3182	87.9	198	5.5
Waterbury	63	8.8	434	60.4	221	30.8	36	5.0	639	89.0	43	6.0
Ansonia/Mlfd	71	11.0	345	53.7	226	35.2	53	8.3	564	87.8	25	3.9
Meriden	69	12.0	308	53.7	196	34.2	38	6.6	504	87.9	31	5.4
New Haven	270	14.9	1069	59.1	469	25.9	102	5.6	1618	89.5	88	4.9
Rizzutti	82	15.9	321	62.2	113	21.9	40	7.8	459	88.9	17	3.3
Ensling	66	14.4	248	54.0	145	31.6	23	5.0	405	88.2	31	6.8
Postman	53	16.9	178	56.9	82	26.2	17	5.4	277	88.5	19	6.1
Pesanelli	69	13.3	322	61.9	129	24.8	22	4.2	477	91.7	21	4.0
District IV	473	12.6	2156	57.6	1112	29.7	229	6.1	3325	88.9	187	5.0
Statewide	1,748	13.1	7,572	56.8	4,001	30.0	955	7.2	11,573	86.9	793	5.9

COMPARISONS OF FINAL OUTCOME INDICES FOR MODEL II
AND MODEL III CASES (CONTROLLING FOR TOTAL RISK SCORES)

TOTAL RISK SCORE	FOI 1A		FOI 1B		FOI 2		FOI 3		FOI 4		FOI 5		TOTAL CASES	
	% MODEL		% MODEL		% MODEL		% MODEL		% MODEL		% MODEL		MODEL	
	II	III	II	III	II	III	II	III	II	III	II	III	II	III
3	--	--	--	--	--	--	100	--	--	--	--	--	1	--
4	50.0	--	--	--	--	--	25.0	--	--	--	25.0	--	4	--
5	25.0	--	--	--	--	--	25.0	--	12.5	--	37.5	100	8	1
6	21.4	50.0	--	--	7.1	--	28.6	50.0	7.1	--	35.7	--	14	2
7	6.7	--	--	--	6.7	--	40.0	--	6.7	50.0	40.0	50.0	15	2
8	30.8	100	--	--	--	--	10.3	--	7.7	--	51.2	--	39	1
9	17.1	22.2	--	--	9.8	--	14.6	11.1	12.2	33.3	46.3	33.3	41	9
10	20.0	7.7	--	--	4.6	7.7	27.7	--	6.1	--	41.5	84.6	65	13
11	7.1	10.0	--	--	7.1	--	25.7	10.0	12.9	10.0	47.1	70.0	70	10
12	27.1	22.2	1.2	--	3.5	--	15.3	33.3	5.9	11.1	47.1	33.3	85	9
13	27.7	--	--	--	3.6	10.0	14.5	20.0	8.4	20.0	45.8	50.0	83	10
14	13.6	5.3	1.1	--	4.5	10.5	23.9	21.1	14.8	--	42.0	63.2	88	19
15	22.6	--	0.9	--	3.5	9.1	12.2	9.1	13.0	9.1	47.8	72.7	115	11
16	11.3	17.6	0.8	5.9	4.8	--	17.7	--	12.1	--	53.2	76.5	124	17
17	14.4	12.5	1.7	--	4.2	--	16.9	16.7	10.2	8.3	52.5	62.5	118	24
18	15.2	16.7	0.7	--	0.7	11.1	11.6	5.6	8.7	11.1	63.0	55.6	138	18
19	10.3	5.0	0.6	--	2.6	--	13.5	5.0	12.9	5.0	60.0	85.0	155	20
20	12.2	16.0	2.0	--	1.4	4.0	12.3	12.0	10.8	12.0	60.8	56.0	148	25
21	11.4	4.0	0.6	--	4.0	--	14.9	8.0	9.7	20.0	59.4	68.0	175	25
22	12.1	12.0	1.1	--	2.1	4.0	11.0	16.0	11.0	6.0	62.6	60.0	190	25
23	13.9	3.1	1.6	3.1	1.6	--	8.6	12.5	7.5	12.5	66.8	68.8	187	32
24	11.1	6.7	1.9	--	2.9	6.7	9.2	3.3	9.7	13.3	65.2	70.0	207	30
25	11.7	6.4	1.3	--	3.0	2.1	6.9	10.6	12.6	8.5	64.5	72.3	231	47
26	7.7	10.0	--	2.0	1.9	2.0	6.9	6.0	12.0	12.0	71.4	88.0	259	50
27	8.0	10.5	0.8	--	1.9	3.5	6.5	7.0	10.3	5.3	72.4	73.7	261	57
28	5.9	6.6	1.2	--	1.6	3.3	8.4	1.6	13.1	8.2	69.8	80.3	321	61
29	7.1	2.9	0.9	--	2.5	2.9	6.5	2.9	11.7	8.8	71.3	82.4	324	68
30	8.0	6.1	1.5	1.2	2.1	1.2	8.0	7.3	6.5	8.5	73.8	75.6	336	82
31	4.9	2.0	1.0	--	1.6	2.0	8.3	3.0	9.8	10.9	74.4	82.2	386	101
32	5.2	5.2	0.5	0.9	1.9	0.9	4.1	2.6	9.0	6.0	79.3	84.5	367	116
33	3.9	5.1	1.3	--	1.6	1.7	5.2	8.5	8.8	4.3	79.2	80.3	384	117
34	7.6	2.6	0.8	--	1.4	0.9	5.0	1.7	9.5	6.9	75.6	87.9	357	116
35	4.5	4.1	0.3	1.0	2.7	2.1	3.6	1.0	9.9	8.2	79.0	83.5	334	97
36	5.6	1.0	1.1	--	0.7	1.0	3.9	2.0	4.9	6.1	83.8	89.8	284	98
37	3.2	--	--	--	1.2	--	4.4	3.8	7.5	7.7	83.7	88.5	252	78
38	2.6	4.8	--	1.6	0.5	--	3.6	1.6	8.7	11.1	84.7	81.0	196	63
39	2.2	--	--	--	1.4	2.1	3.6	4.2	7.3	2.1	85.4	91.7	137	48
40	4.4	3.2	--	--	1.1	6.5	--	--	5.6	9.7	88.9	80.6	90	31
41	3.2	--	--	--	1.6	--	1.6	--	7.9	4.5	85.7	95.5	63	22
42	2.6	--	--	--	--	--	--	7.7	2.6	15.4	94.9	76.9	39	13
43	--	--	--	--	--	--	--	--	15.0	--	85.0	100.0	20	8
44	--	--	--	--	--	--	--	--	--	--	100.0	100.0	10	3
45	--	--	--	--	6.7	--	--	25.0	6.7	--	86.7	75.0	15	4
TOTAL CASES	578	81	56	7	147	32	558	83	647	128	4750	1252	6736	1583

CONCLUSION: Model III cases are nearly ten percent more successful than Model II cases.

BEAI ADJUSTED SCORES IN EDUCATION FOR
MODEL II AND MODEL III CASES
CONTROLLING FOR RISK

TOTAL RISK SCORE	MODEL II				MODEL III			
	NO CHANGE	% NO CHANGE	INCREASE	% INCREASE	NO CHANGE	% NO CHANGE	INCREASE	% INCREASE
1	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--
3	1	100	--	--	--	--	--	--
4	3	100	--	--	--	--	--	--
5	6	100	--	--	1	100	--	--
6	13	86.7	2	13.3	2	100	--	--
7	13	92.9	1	7.1	2	100	--	--
8	33	100	--	--	1	100	--	--
9	32	88.9	4	11.1	7	87.5	1	12.5
10	56	93.3	4	6.7	13	92.9	1	7.1
11	61	93.8	4	6.2	10	100	--	--
12	78	95.1	4	4.9	9	90.0	1	10.0
13	75	97.4	2	2.6	9	90.0	1	10.0
14	81	98.8	1	1.2	18	90.0	2	10.0
15	106	96.4	4	3.6	10	83.3	2	16.7
16	113	95.0	6	5.0	10	66.7	5	33.3
17	107	94.7	6	5.3	19	95.0	1	5.0
18	129	97.7	3	2.3	14	93.3	1	6.7
19	136	95.7	6	4.2	20	87.0	3	13.0
20	141	96.6	5	3.4	18	78.3	5	21.7
21	167	97.1	5	2.9	24	96.0	1	4.0
22	170	95.5	8	4.5	23	95.8	1	4.2
23	162	93.6	11	6.4	26	83.9	5	16.1
24	192	95.5	9	4.5	21	87.5	3	12.5
25	209	94.6	12	5.4	41	89.1	5	10.9
26	232	95.9	10	4.1	34	73.9	12	26.1
27	234	93.6	16	6.4	52	94.5	3	5.5
28	291	94.5	17	5.5	53	89.8	6	10.2
29	283	92.8	22	7.2	56	86.2	9	13.8
30	301	94.1	19	5.9	70	85.4	12	14.6
31	347	92.8	27	7.2	83	83.8	16	16.2
32	321	90.4	34	9.6	95	85.6	16	14.4
33	331	87.6	47	12.4	96	88.1	13	11.9
34	305	89.2	37	10.8	90	78.3	25	21.7
35	283	86.8	43	13.2	76	82.6	16	17.4
36	238	86.9	36	13.1	76	80.0	19	20.0
37	201	84.8	36	15.2	59	77.6	17	22.4
38	160	86.5	25	13.5	43	70.5	18	29.5
39	112	84.8	20	15.2	36	76.6	11	23.4
40	82	91.1	8	8.9	26	83.9	5	16.1
41	52	89.7	6	10.3	14	66.7	7	33.3
42	35	94.6	2	5.4	10	90.9	1	9.1
43	17	94.4	1	5.6	7	87.5	1	12.5
44	10	100	--	--	3	100	--	--
45	12	100	--	--	3	100	--	--
TOTAL	5,931	92.2	503	7.8	1,280	83.9	245	16.1

CONCLUSION: Model III probationers are more likely to improve their education index scores than Model II probationers. Both Model II and Model III probationers with high total risk scores tend to improve their education index scores more frequently than those with lower total risk scores.

BEAI ADJUSTMENT SCORES IN EMPLOYMENT FOR
MODEL II AND III CASES CONTROLLING FOR RISK SCORES

TOTAL RISK SCORE	MODEL II						MODEL III					
	DECREASE	% DECREASE	NO CHANGE	% NO CHANGE	INCREASE	% INCREASE	DECREASE	% DECREASE	NO CHANGE	% NO CHANGE	INCREASE	% INCREASE
1	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	1	100	--	--	--	--	--	--	--	--
4	--	--	3	100	--	--	--	--	--	--	--	--
5	--	--	5	83.3	1	16.7	--	--	--	1	100	--
6	1	6.7	8	53.3	6	40.0	--	--	1	50.0	1	50.0
7	1	7.1	7	50.0	6	42.8	--	--	2	100	--	--
8	1	3.0	16	48.5	16	48.5	--	--	1	100	--	--
9	3	8.1	21	56.8	13	35.1	1	12.5	2	25.0	5	62.5
10	5	8.3	39	65.0	16	26.7	--	--	10	71.4	4	28.6
11	10	15.4	35	53.8	20	30.8	1	9.1	4	36.4	6	54.5
12	9	10.9	44	53.7	29	35.4	--	--	6	54.5	5	45.5
13	12	14.6	43	52.4	27	32.9	1	10.0	5	50.0	4	40.0
14	17	20.5	44	53.0	22	26.5	--	--	14	70.0	6	30.0
15	21	18.6	50	44.2	42	37.2	2	16.7	4	33.3	6	50.0
16	20	17.2	50	43.1	46	39.7	--	--	7	43.8	9	56.2
17	19	16.8	52	46.0	42	37.2	3	14.3	6	28.6	12	57.1
18	23	17.4	64	48.5	45	34.1	2	13.3	6	40.0	7	46.7
19	34	23.1	71	48.3	42	28.6	2	8.7	11	47.8	10	43.5
20	26	17.7	72	49.0	49	33.3	4	16.7	7	29.2	13	54.2
21	23	13.2	91	52.3	60	34.5	6	23.1	9	34.6	11	42.3
22	28	15.6	93	51.7	59	32.8	3	12.5	9	37.5	12	50.0
23	35	19.6	78	43.6	66	36.8	2	6.5	11	35.5	18	58.0
24	36	17.8	94	46.5	72	35.6	2	7.7	10	38.5	14	53.8
25	37	16.4	104	46.2	84	37.3	9	19.6	12	26.1	25	54.3
26	36	14.6	114	46.3	96	39.0	7	14.9	15	31.9	25	53.2
27	47	18.5	116	45.7	91	35.8	8	14.3	19	33.9	29	51.8
28	39	12.5	155	49.5	119	38.0	10	16.4	24	39.3	27	44.3
29	49	15.8	157	50.6	104	33.5	14	21.5	16	24.6	35	53.8
30	59	12.8	146	45.1	119	36.7	17	20.7	33	40.2	32	39.0
31	65	17.1	181	47.7	133	35.1	8	8.1	45	45.0	46	46.5
32	48	13.4	193	53.8	118	32.8	18	15.6	49	42.6	48	41.7
33	59	15.4	181	47.4	142	37.2	11	9.7	50	44.2	52	46.0
34	67	19.3	187	53.9	93	26.8	15	14.3	56	53.3	44	41.9
35	48	14.5	181	54.7	102	30.8	17	18.3	53	57.0	23	24.7
36	40	14.5	157	57.1	78	28.4	14	14.4	45	46.4	38	39.2
37	37	15.1	153	62.4	55	22.4	14	17.9	42	53.8	22	28.2
38	26	13.6	126	66.0	39	20.4	9	14.7	29	47.5	23	37.7
39	30	12.2	91	67.4	14	10.4	11	23.4	27	57.4	9	19.1
40	13	14.1	70	76.1	9	9.8	3	9.7	24	77.4	4	12.9
41	9	14.5	46	74.2	7	11.3	6	27.3	14	63.6	2	9.1
42	6	15.8	30	78.9	2	5.3	6	50.0	5	41.7	1	8.3
43	6	31.6	11	57.9	2	10.5	1	12.5	6	75.0	1	12.5
44	1	10.0	9	90.0	--	--	1	33.3	2	66.7	--	--
45	3	25.0	8	66.7	1	8.3	--	--	3	100	--	--
TOTAL	1,049	16.0	3401	52.0	2,087	31.9	228	14.7	694	44.7	630	40.6

CONCLUSION: Model III clients are more likely to improve their employment index scores than Model II probationers. Improvement in both groups is generally constant across the full range of total risk score points.

CONTINUED

1 OF 2

BEAI ADJUSTMENT SCORES IN DRUGS, ALCOHOL, AND MENTAL HEALTH
FOR MODEL II AND III CASES CONTROLLING FOR RISK SCORES

TOTAL RISK SCORE	MODEL II						MODEL III					
	DECREASE	% DECREASE	NO CHANGE	% NO CHANGE	INCREASE	% INCREASE	DECREASE	% DECREASE	NO CHANGE	% NO CHANGE	INCREASE	% INCREASE
1	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	1	100	--	--	--	--	--	--	--	--
4	--	--	3	100	--	--	--	--	--	--	--	--
5	--	--	4	66.7	2	33.3	--	--	1	100	--	--
6	--	--	11	73.3	4	26.7	--	--	1	50.0	1	50.0
7	1	7.1	7	50.0	6	42.9	--	--	1	50.0	1	50.0
8	1	3.0	21	63.6	11	33.3	--	--	1	100	--	--
9	1	2.7	29	78.4	7	18.9	1	12.5	4	50.0	3	37.5
10	3	5.0	49	81.7	8	13.3	1	7.1	11	78.6	2	14.3
11	5	7.7	45	69.2	15	23.1	1	10.0	3	30.0	7	70.0
12	4	2.2	57	31.3	21	11.5	2	18.2	4	36.4	5	45.4
13	7	8.5	56	68.3	19	23.2	--	--	7	70.0	3	30.0
14	4	4.8	65	78.3	14	16.9	--	--	16	80.0	4	20.0
15	10	8.8	73	64.6	30	26.5	1	8.3	7	58.3	4	33.3
16	8	6.7	80	66.7	32	26.7	--	--	9	56.3	7	43.7
17	6	5.3	85	75.2	22	19.5	1	4.8	13	61.9	7	33.3
18	8	6.1	92	69.7	32	24.2	1	6.7	9	60.0	5	33.3
19	15	10.2	91	61.9	41	27.9	1	4.3	15	65.2	7	30.4
20	11	7.5	108	73.5	28	19.0	2	8.3	15	62.5	7	29.2
21	20	11.5	125	71.8	29	16.7	2	7.7	17	65.4	7	26.9
22	26	14.4	120	66.7	34	18.9	2	8.3	15	62.5	7	29.2
23	18	10.1	114	63.7	47	26.3	3	9.7	15	48.4	13	41.9
24	21	10.4	144	71.3	37	18.3	2	7.7	13	50.0	11	42.3
25	22	9.8	152	67.6	51	22.7	4	8.7	30	65.2	12	26.1
26	24	9.7	186	75.6	36	14.6	3	6.4	30	63.8	14	29.8
27	29	11.4	162	63.8	63	24.8	7	12.5	30	53.6	19	33.9
28	30	9.6	221	70.6	62	19.8	9	14.7	36	59.0	16	26.2
29	31	10.0	231	74.5	48	15.5	7	10.8	41	63.1	17	26.1
30	35	10.8	242	74.7	47	14.5	13	15.9	50	61.0	19	23.1
31	40	10.6	291	76.8	48	12.7	4	4.0	63	63.6	32	32.3
32	30	8.4	276	76.9	53	14.8	11	9.6	80	69.6	24	20.9
33	33	8.6	291	76.2	58	15.2	14	12.4	72	63.7	27	23.9
34	33	9.5	275	79.3	39	11.2	7	6.1	89	77.4	19	16.5
35	28	8.5	268	81.0	35	10.5	7	7.5	72	77.4	14	15.1
36	20	7.3	226	82.2	29	10.5	4	4.1	84	86.6	9	9.3
37	20	8.2	206	84.1	19	7.7	3	3.8	65	83.3	10	12.8
38	13	6.8	169	88.5	9	4.7	4	6.6	54	88.5	3	4.9
39	12	8.9	117	86.7	6	4.4	3	6.4	40	85.1	4	8.5
40	10	10.9	77	83.7	5	5.4	3	9.7	28	90.3	--	--
41	2	3.2	58	93.5	2	3.2	--	--	21	95.5	1	4.5
42	1	2.6	36	94.7	.1	2.6	1	8.3	11	91.7	--	--
43	1	5.3	18	94.7	--	--	--	--	8	100	--	--
44	--	--	10	100	--	--	--	--	3	100	--	--
45	1	8.3	11	91.7	--	--	--	--	3	100	--	--
TOTAL	584	8.9	4903	75.0	1050	16.1	124	8.0	1087	70.0	341	22.0

BEAI ADJUSTMENT SCORES IN FAMILY STRUCTURE INDEX
FOR MODEL II AND MODEL III CASES CONTROLLING FOR RISK SCORES

TOTAL RISK SCORE	MODEL II						MODEL III					
	DECREASE	X DECREASE	NO CHANGE	ZNO CHANGE	INCREASE	X INCREASE	DECREASE	X DECREASE	NO CHANGE	ZNO CHANGE	INCREASE	X INCREASE
1	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--
3	--	--	1	100	--	--	--	--	--	--	--	--
4	--	--	2	66.7	1	33.3	--	--	--	--	--	--
5	--	--	5	83.3	1	16.7	--	--	--	--	1	100
6	2	13.3	11	73.3	2	13.3	--	--	2	100	--	--
7	1	7.1	10	71.4	3	21.4	--	--	2	100	--	--
8	2	6.1	27	81.8	4	12.1	--	--	1	100	--	--
9	2	5.4	29	78.4	6	16.2	1	12.5	4	50.0	3	37.5
10	4	6.7	51	85.0	5	8.3	--	--	12	85.7	2	14.3
11	7	10.8	49	75.4	9	13.8	2	18.2	7	63.6	2	18.2
12	4	4.9	69	84.1	9	10.9	2	18.2	9	81.8	--	--
13	9	11.0	64	78.0	9	11.0	2	20.0	8	80.0	--	--
14	13	15.7	64	77.1	6	7.2	2	10.0	14	70.0	4	20.0
15	12	10.6	85	75.2	16	14.1	1	8.3	9	75.0	2	16.7
16	11	9.2	93	77.5	16	13.3	2	12.5	9	56.3	5	31.2
17	8	7.1	93	82.3	12	10.6	1	4.8	17	80.9	3	14.3
18	17	12.9	105	79.5	10	7.6	--	--	14	93.3	1	6.7
19	17	11.6	124	84.4	6	4.1	1	4.3	19	82.6	3	13.0
20	17	11.6	116	78.9	14	9.5	4	16.7	18	75.0	2	8.3
21	18	10.3	135	77.6	21	12.1	2	7.7	20	76.9	4	15.4
22	18	10.0	144	80.0	18	10.0	2	8.3	21	87.5	1	4.2
23	22	12.3	144	80.4	13	7.3	--	--	28	90.3	3	14.3
24	22	10.9	159	78.7	21	10.4	3	11.5	18	69.2	5	19.2
25	20	8.9	184	81.8	21	9.3	2	4.3	40	86.9	4	8.7
26	24	9.8	201	81.7	21	8.5	1	2.1	37	78.7	9	19.1
27	27	10.6	206	81.1	21	8.3	3	5.4	45	80.3	8	14.3
28	32	10.2	257	82.1	24	7.7	3	4.9	50	82.0	8	13.1
29	24	7.7	268	86.4	18	5.8	3	4.6	59	90.8	3	4.6
30	31	9.6	269	83.0	24	7.4	13	15.8	61	73.4	8	9.8
31	36	9.5	317	83.6	26	6.9	10	10.1	84	84.8	5	5.1
32	34	9.5	305	84.9	20	5.6	11	9.6	92	80.0	12	10.4
33	36	9.4	324	84.8	22	5.8	10	8.9	97	85.8	6	5.3
34	25	7.2	307	88.5	15	4.3	2	1.7	106	92.2	7	6.1
35	24	7.3	290	87.6	17	5.1	7	7.5	79	84.9	7	7.5
36	12	4.4	257	93.5	6	2.2	8	8.2	83	85.6	6	6.2
37	24	9.8	215	87.8	6	2.4	9	11.5	66	84.6	3	3.8
38	11	5.7	174	91.1	6	3.1	3	4.9	57	93.4	1	1.6
39	14	10.4	118	87.4	3	2.2	3	6.4	43	91.5	1	2.1
40	4	4.3	88	95.7	--	--	2	6.4	28	90.3	1	3.2
41	5	8.1	57	91.9	--	--	1	4.5	21	95.5	--	--
42	1	2.6	37	97.4	--	--	3	25.0	9	75.0	--	--
43	2	10.5	17	89.5	--	--	--	--	8	100	--	--
44	--	--	10	100	--	--	--	--	3	100	--	--
45	--	--	12	100	--	--	--	--	3	100	--	--
TOTAL	592	9.1	5,493	84.0	452	6.9	119	7.7	1,303	83.9	130	8.4

CONCLUSION: Both Model II and Model III probationers exhibit similar improvement rates in the family structure index across the full range of risk score points. Both Model II and Model III probationers with low total risk scores tend to improve their family structure index scores more frequently than those with higher total risk scores.

COMPARISON OF INTAKE AND DISCHARGE BEAI SCORES FOR
MODEL II AND MODEL III PROBATIONERS

BEAI SCORE (DISCHARGE)	MODEL II						MODEL III					
	INCREASE	% INCREASE	NO CHANGE	% NO CHANGE	DECREASE	% DECREASE	INCREASE	% INCREASE	NO CHANGE	% NO CHANGE	DECREASE	% DECREASE
1	--	--	1	11.1	8	88.9	--	--	1	33.3	2	66.7
2	1	3.7	18	66.7	8	29.6	--	--	1	25.0	3	75.0
3	--	--	18	41.9	25	58.1	--	--	2	50.0	2	50.0
4	3	5.3	23	40.4	31	54.4	1	7.7	5	38.5	7	53.8
5	7	8.1	33	38.4	46	53.5	1	8.3	6	50.0	5	41.7
6	15	11.4	57	43.2	60	45.5	2	14.3	5	35.7	7	50.0
7	18	14.1	53	41.4	57	44.5	1	7.7	5	38.5	7	53.8
8	29	20.3	50	35.0	64	44.8	4	19.0	8	38.1	9	42.9
9	41	19.2	92	43.2	80	37.6	8	36.4	7	31.8	7	31.8
10	49	22.4	79	36.1	91	41.6	4	13.3	10	33.3	16	53.3
11	58	24.3	97	40.6	84	35.1	14	31.1	10	22.2	21	46.7
12	71	24.7	104	36.2	112	39.0	13	30.9	9	21.4	20	47.6
13	114	35.1	120	36.9	91	28.0	19	36.5	17	32.7	16	30.8
14	132	34.7	156	41.0	92	24.2	23	45.1	9	17.6	19	37.2
15	140	36.5	126	32.8	118	30.7	36	41.9	31	36.0	19	22.1
16	192	44.1	156	35.9	87	20.0	43	40.2	42	39.3	22	20.6
17	207	42.9	185	38.4	90	18.7	75	57.3	30	22.9	26	19.8
18	257	49.6	188	36.3	73	14.1	79	63.7	26	21.0	19	15.3
19	228	50.2	164	36.1	62	13.7	86	64.2	35	26.1	13	9.7
20	278	55.6	186	37.2	36	7.2	79	61.7	36	28.1	13	10.2
21	228	56.4	151	37.4	25	6.2	86	69.9	33	26.8	4	3.2
22	221	56.5	151	38.6	19	4.9	86	69.3	32	25.8	6	4.8
23	128	63.0	71	35.0	4	2.0	58	69.0	23	27.4	3	3.6
24	159	55.2	118	40.9	11	3.8	74	69.2	33	30.8	--	--
25	44	69.8	18	28.6	1	1.6	19	79.2	3	12.5	2	8.3
26	39	48.7	36	45.0	5	6.3	23	67.6	8	23.5	3	8.8
27	7	53.8	5	38.5	1	7.7	3	50.0	3	50.0	--	--
28	8	33.3	16	66.7	--	--	3	42.8	4	57.1	--	--
29	4	100	--	--	--	--	3	100	--	--	--	--
30	2	100	--	--	--	--	1	100	--	--	--	--
TOTAL	2,680	41.0	2472	37.8	1381	21.1	844	54.5	434	28.0	271	17.5

CONCLUSION: Model III probationers generally experienced better adjustment than Model II probationers. Clients with high BEAI scores were more likely to exhibit improvements than were clients with low BEAI scores.

COMPARISON OF FINAL OUTCOME INDICES BETWEEN MODEL II
AND MODEL III CASES BY INTAKE DATE AND TYPE OF OFFICE
(REGULAR HARTFORD OFFICES VS. SPECIALIZED SERVICES UNIT)

FOI	HARTFORD (EXCEPT SSU) MODEL II		HARTFORD (EXCEPT SSU) MODEL III		SSU POST 11/77	
	PRE 9/79	POST 9/79	PRE 9/79	POST 9/79	MODEL II	MODEL III
1A	35	30	4	6	17	3
1B	3	5	0	1	2	2
2	5	10	0	1	5	0
3	26	25	0	1	7	0
4	20	35	3	7	6	3
5	<u>195</u>	<u>268</u>	<u>41</u>	<u>113</u>	<u>74</u>	<u>37</u>
TOTAL	284	373	48	129	111	45
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
1A	12.3%	8.0%	8.3%	4.7%	15.3%	6.7%
1B	1.0	1.3	--	0.8	1.8	4.4
2	1.8	2.7	--	0.8	4.5	0
3	9.2	6.7	--	0.8	6.3	0
4	7.0	9.4	6.3	5.4	5.4	6.7
5	68.7	71.8	85.4	87.6	66.7	82.2

CONCLUSION: The Hartford probation offices (except the SSU office) terminated a slightly higher percentage of successful Model II and Model III cases after September of 1979. The SSU office, after November of 1977, successfully terminated Model III cases at a higher rate than Model II cases.

IMPACT OF ADJUSTING HIGH-LOW RISK CUTOFF SCORES
ON TOTAL CASELOAD AND SUCCESS/FAILURE RATES*

ACTIVE/INACTIVE TOTAL RISK SCORE CUTOFF (REVISED SCALE)	ESTIMATED % OF LOW-RISK - INACTIVE CASES	ESTIMATED % OF HIGH RISK - ACTIVE CASES	% SUCCESS CASES - INACTIVE	% SUCCESS CASES - ACTIVE	% FAILURE CASES - INACTIVE	% FAILURE CASES - ACTIVE
19/20	90.06	9.94	82.40	52.29	17.59	47.71
20/21	88.65	11.35	82.77	53.30	17.23	46.70
21/22	87.17	12.83	83.18	53.93	16.82	46.07
22/23	85.55	14.45	83.60	54.72	16.40	45.28
23/24	83.84	16.16	84.02	55.56	15.98	44.44
24/25	81.94	18.06	84.47	56.52	15.53	43.48
25/26	79.87	20.13	84.94	57.54	15.06	42.46
26/27	77.50	22.50	85.07	58.59	14.53	41.40
27/28	74.92	25.08	85.95	59.93	14.05	40.07
28/29	72.17	27.83	86.41	61.28	13.59	38.72
29/30	68.78	31.22	87.03	62.64	12.97	37.36
30/31	65.13	34.87	87.73	63.91	12.27	36.09
31/32	61.29	38.71	88.37	65.24	11.63	34.76
32/33	56.61	43.39	89.15	66.72	10.85	33.28
33/34	51.69	48.31	89.66	68.46	10.34	31.54
34/35	46.40	53.60	90.55	69.78	9.45	30.22
35/36	40.76	59.24	91.58	171.05	8.42	28.95

* THIS TABLE REPRESENTS ESTIMATED VALUES BASED ON THE COHORT I DATA FILE SINCE ACTUAL CLASSIFICATION DECISIONS ARE INFLUENCED BY OTHER FACTORS (special conditions). THE NUMBER OF INACTIVE CASES WILL THEREFORE BE LESS THAN SUGGESTED BY THIS TABLE. ACTUAL SUCCESS AND FAILURE RATES MAY VARY DUE TO THE IMPACT OF PROBATION SUPERVISION. POPULATION SUCCESS/FAILURE RATES ARE THEREFORE CONSTANT THROUGHOUT THE RANGE OF CUTOFF SCORES IN THIS TABLE.

CONCLUSION: As the active/inactive cutoff point decreases, the number of inactive cases will increase since fewer cases will require supervision. For each one point decrease in the cutoff scores, approximately one-half percent increase in failure rates can be expected.

D. C. M. B. O. CASE SCREENING / MANAGEMENT INSTRUMENT

Client's Name (First and Last) _____ State Number (Full) _____

Officer's Name (Last, First Initial) _____ Date of Probation (Include projected termination date) _____

FROM: [] [] [] [] TO: [] [] [] []

Offense(s) (List all offenses for which probation was imposed) _____

Client Ethnicity (Indicate by number) 1 = White 3 = Hispanic 5 = Amer. Ind.
 2 = Black 4 = Asian 6 = Other

1. SEVERITY OF INSTANT OFFENSE(S): (Scoring range is 0 to 6 points. Rate most serious offense then subtract 1 point for each additional count and/or offense. Enter score in box at left.)

"B-Fel." = 1 "C-Fel." = 2 "D-Fel." = 3 "A-Misd." = 4 "B-Misd." = 5 "C-Misd." = 6

2. PRIOR RECORD: (Check box indicating age. Convert felonies to misdemeanors; 1 Fel. = 3 Misd. *For clients age 16-19, prior juvenile commit. = 6 misd., juvenile probation = 3 misd. Enter score in box at left.)

AGE	+ 7 MISD.	7 MISD.	6 MISD.	5 MISD.	4 MISD.	3 MISD.	2 MISD.	1 MISD.	NONE
16 - 19*	0	0	0	2	4	6	8	10	12
20 - 23	0	0	1	2	5	7	9	11	12
24 - 27	0	0	2	3	6	8	9	11	12
28 - 35	0	0	2	4	6	8	10	12	12
36 - 45	0	0	3	5	6	9	10	12	12
46 - 60	0	0	3	5	7	9	11	12	12
+ 60	0	0	3	6	8	10	11	12	12

3. EXTENT OF EDUCATION: (Indicate highest grade completed by entering score in intake box at left)

LT 8th = 0 8th = 1 9th = 2 10th = 3 11th = 4 H.S. GRAD./G.E.D. = 5 POST H.S. EDUC. OR TRAINING = 7 COMP. POST H.S. EDUC./TRAINING = 9

4. EMPLOYMENT RELATED ACTIVITIES DURING PAST 12 MONTHS: (CHECK APPROPRIATE BOXES AND ENTER SCORE AT LEFT)

FULL TIME <input type="checkbox"/>	PART TIME <input type="checkbox"/>	MONTHS OF ACTIVITY	FULL TIME POINTS:	PART TIME POINTS:
EMPLOYMENT	EMPLOYMENT	1 - 2 MONTHS	1	1/2
SCHOOL	SCHOOL	3 - 4 MONTHS	2	1
TRAINING	TRAINING	5 - 6 MONTHS	3	3/4
HOMEMAKING	HOMEMAKING	7 - 8 MONTHS	4	2
RESID. PROGRAM	UNEMP. COMP.	9 - 10 MONTHS	5	3 1/2
	SOC.SEC./PENSION	11 - 12 MONTHS	6	3

5. ALCOHOL, DRUG &/or MENTAL HEALTH PROBLEMS: (Check appropriate boxes and enter score at left)

ALCOHOL	0	3	5	7	0 = Serious current problem
DRUGS					3 = Moderate current problem
MENTAL HEALTH					5 = Prior or minor problem
					7 = No problem

For cases involving more than one problem, enter 0 at left. Exception: Minor abuse of both drugs and alcohol, enter 3 at left.

6. EXISTING FAMILY STRUCTURE: (Enter most appropriate score to box at left)

RESIDES AWAY FROM FAMILY WITH FEW OR NO FAMILY TIES 1
 RESIDES AWAY FROM FAMILY WITH SOME TIES TO EXISTENT FAMILY 2
 SEPERATED/DIVORCED FROM SPOUSE BUT CARING FOR OR SUPPORTING CHILD 3
 SINGLE EMANCIPATED FROM PARENTAL HOME WITH STRONG TIES EXISTENT FAMILY 3 1/2
 RESIDES IN ONE PARENT HOME OR MARRIED WITHOUT CHILDREN, SUPPORTS SPOUSE 4
 RESIDES IN TWO PARENT HOME OR MARRIED WITH CHILDREN, SUPPORTS FAMILY 6

<input type="checkbox"/> TOTAL RISK PREDICTIVE SCORE: (Add 1. thru 6.)	<input type="checkbox"/> MODEL OF RECORD (Check one box) I <input type="checkbox"/> II <input type="checkbox"/> III <input type="checkbox"/>	<input type="checkbox"/> PRIMARY GOAL (To be completed upon discharge of M-III cases only) GOAL: TO _____ Percent Achieved: [] %	FINAL OUTCOME INDEX: (Check one box upon discharge) 1. Actual Violation of Probation Determined by the Court <input type="checkbox"/> 1a. Probation Revoked <input type="checkbox"/> 1b. Probation Continued 2. Presentment in Court as Violator OR Application made for Arrest Warrant <input type="checkbox"/> 3. Convicted for subsequent offense while on probation resulting in incarceration of probationer <input type="checkbox"/> 4. Conviction for subsequent offense while on probation NOT resulting in incarceration of probationer <input type="checkbox"/> 5. No conviction while on Probation
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CRIMINAL INDEX

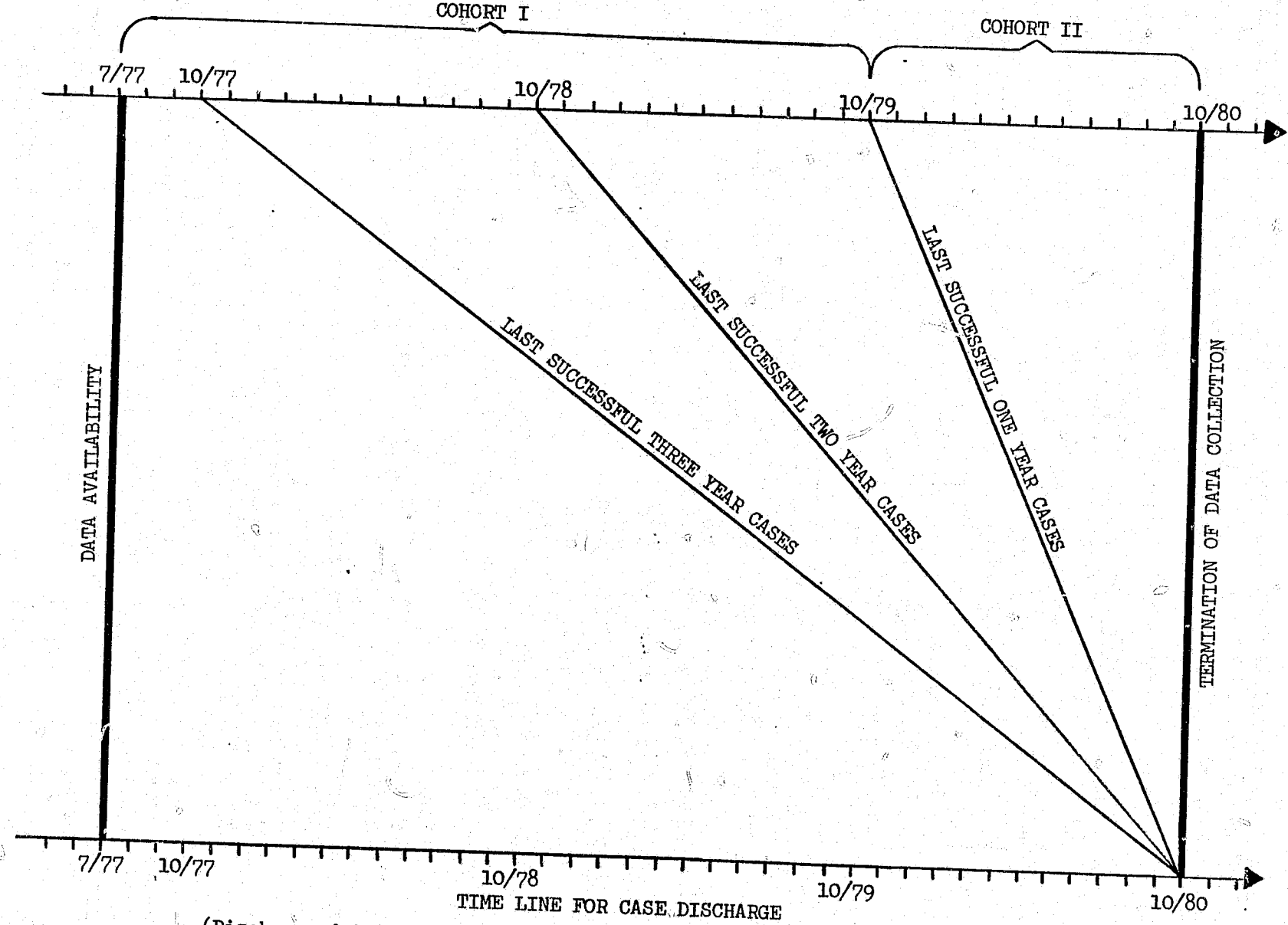
BEHAVIORAL AND ENVIRONMENTAL ADJUSTMENT INDEX

OUTCOME INDEX

INTAKE
DISCHARGE

INTAKE
DISCHARGE

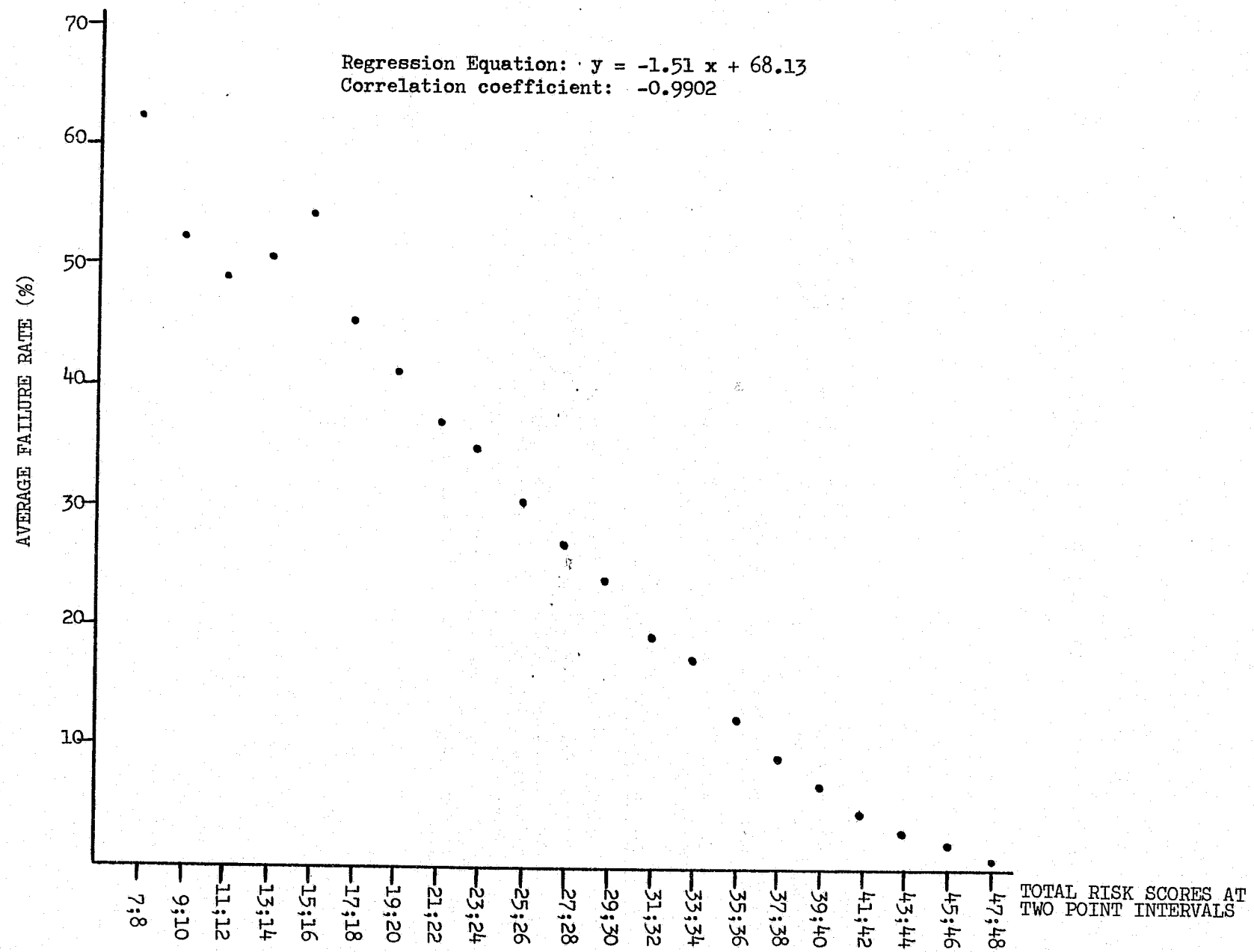
DISPLAY TWO
TIME LINE FOR CASE INTAKE SCREENING
COHORT I



(Discharge data collected only for cases screened between 7/77 and 10/79)

DISPLAY THREE

RELATIONSHIP BETWEEN RISK SCORE AND PROBATIONER SUCCESS
For a sample of 14,300 cases



COHORT I PROFILE STATISTICS

DISPLAY FOUR

Total cases = 14,300 Mean Risk Score = 31.04 points
 Total Failure cases = 2,944 Mean Risk Score = 25.12 points
 Total Success cases = 11,356 Mean Risk Score = 32.61 points

Blocked (2 point) Risk Score Intervals

regression line: failure (%) = -1.51 (risk score) + 68.13
 correlation coefficient: $r = -0.990$ ($r^2 = .980$)

Single Point Risk Score Intervals

risk score related to outcome (hypothesis: p failure % = .2059)
 $\chi^2 = 865.11$, $df = 43$, $p < .001$, upper limit $\chi^2 = 14,300$
 regression line: failure (%) = -1.40 (risk score) + 64.30
 correlation coefficient: $r = -.988$ ($r^2 = .976$)
 risk score related to individual outcomes: $rpb = +.828$
 significance of rpb (hypothesis: $rpb = 0$)
 $t = 176.56$, $df = 00$, $p < .001$

FREQUENCY DISTRIBUTION OF SUCCESS/FAILURE CASES BY RISK SCORE

DISPLAY FIVE

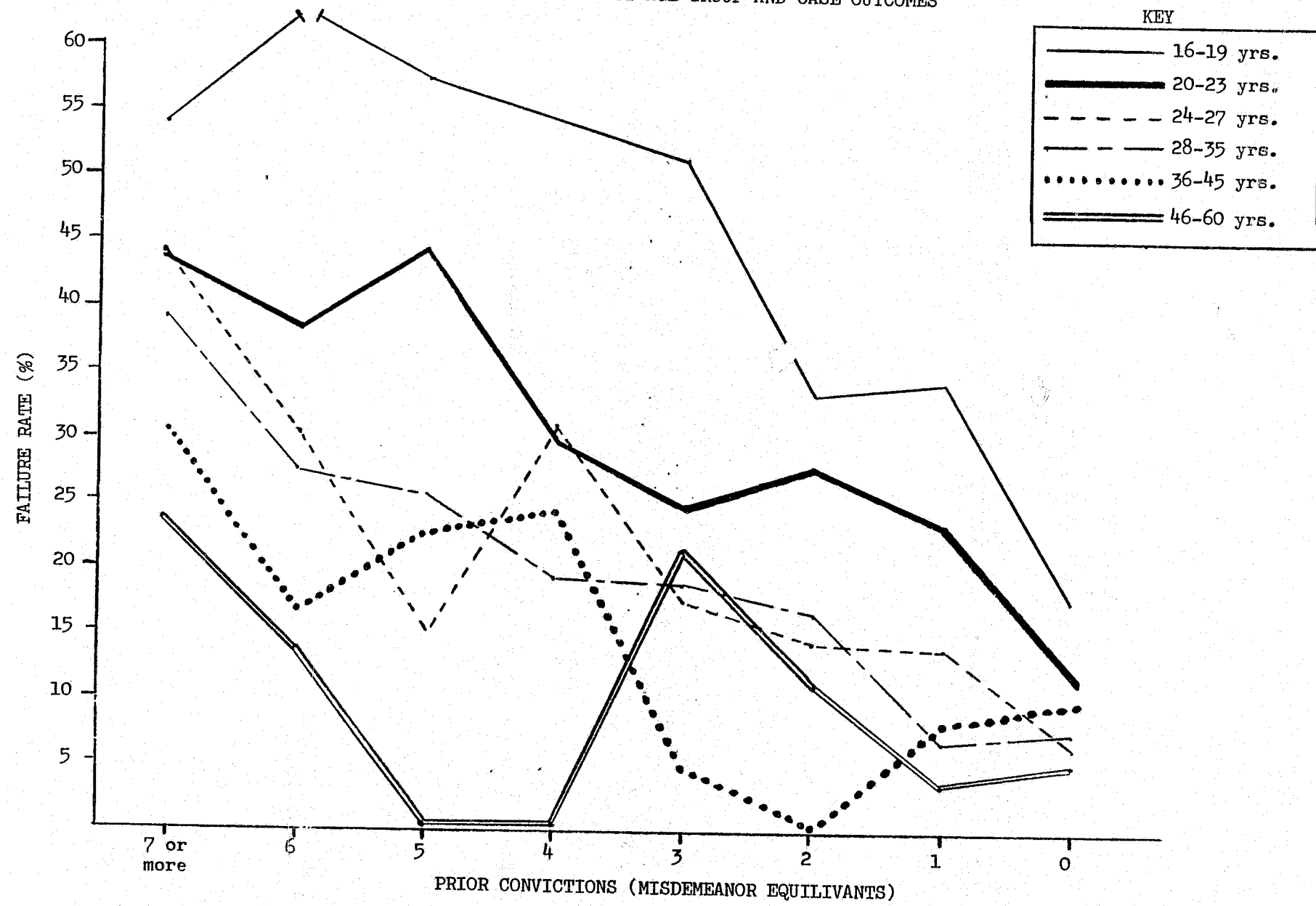
<u>TOTAL RISK SCORE</u>	<u>FAILURE CASES</u>	<u>SUCCESS CASES</u>	<u>TOTAL CASES</u>
3	1	1	2
4	3	1	4
5	8	5	13
6	13	7	21
7	13	10	23
8	24	24	48
9	31	29	60
10	43	46	89
11	45	48	93
12	59	55	114
13	64	58	122
14	80	60	140
15	71	78	149
16	74	99	173
17	74	103	177
18	75	118	193
19	80	122	202
20	87	124	211
21	91	142	233
22	91	153	244
23	96	176	272
24	99	196	295
25	110	229	339
26	105	264	369
27	104	290	394
28	127	358	485
29	132	390	522
30	124	424	548
31	141	529	670
32	114	589	703
33	137	620	757
34	136	670	806
35	107	715	822
36	97	766	863
37	78	791	869
38	75	744	819
39	57	598	655
40	30	525	555
41	20	401	421
42	14	348	362
43	7	163	170
44	3	149	152
45	3	137	140

DISPLAY SIX

SEVERITY OF THE INSTANT OFFENSE AND CASE OUTCOME RATES

<u>RISK SCORE POINTS</u>	<u>TOTAL CASES</u>	<u>NUMBER SUCCESSFUL</u>	<u>PERCENT SUCCESSFUL</u>	<u>NUMBER FAILURE</u>	<u>PERCENT FAILURE</u>
0	253	166	65.6	87	34.4
1 (B-Felony)	354	265	74.9	89	25.1
2 (C-Felony)	1054	796	75.5	258	24.5
3 (D-Felony)	2546	1882	73.9	664	26.1
4 (A-Misd.)	3633	2917	80.3	716	19.7
5 (B-Misd.)	3558	2819	79.2	739	20.8
6 (C-Misd.)	2901	2511	86.5	391	13.5
TOTAL	14300	11356		2944	

DAY SEVEN
 PRIOR CONVICTIONS BY AGE GROUP AND CASE OUTCOMES



DISPLAY EIGHT

PRIOR RECORD AND CASE OUTCOME RATES

<u>NUMBER OF EQUIVARIANT MISDEMEANOR CONVICTIONS</u>	<u>TOTAL CASES</u>	<u>NUMBER SUCCESSFUL</u>	<u>PERCENT SUCCESSFUL</u>	<u>NUMBER FAILURE</u>	<u>PERCENT FAILURE</u>
7 or More	1521	858	56.4	663	43.6
6	238	161	67.7	77	32.3
5	299	189	63.2	110	36.8
4	444	294	66.2	150	33.8
3	900	608	67.6	292	32.4
2	715	541	75.7	174	24.3
1	1379	1032	74.8	347	25.2
None	8716	7606	87.3	1110	12.7
TOTAL*	14212	11289		2923	

*Prior record data was not available for 88 of the 14,300 cases.

DISPLAY NINE

CLIENT AGE AND CASE OUTCOME RATES

<u>AGE RANGE</u>	<u>TOTAL CASES</u>	<u>NUMBER SUCCESSFUL</u>	<u>PERCENT SUCCESSFUL</u>	<u>NUMBER FAILURE</u>	<u>PERCENT FAILURE</u>
16-19 yrs.	5727	4243	74.1	1484	25.9
20-23 yrs.	3066	2457	80.1	609	19.9
24-27 yrs.	1699	1387	81.6	312	18.4
28-35 yrs.	1770	1467	82.9	303	17.1
36-45 yrs.	990	866	87.5	124	12.5
46-60 yrs.	813	732	90.0	81	10.0
Over 60 yrs.	170	158	92.9	12	7.1
TOTAL*	14235	11310		2925	

*Client age data was not available for 65 of the 14,300 cases.

DISPLAY TEN

CHI-SQUARE TESTS OF PRIOR RECORD INDEX REVISIONS
Prior Convictions by Case Outcome

TOTAL INDEX

7 or more misdemeanor equivilants
vs. 3-6 misdemeanor equivilants
vs. 1-2 misdemeanor equivilants
vs. No prior record
 $\chi^2 = 1034.53$, $p < .001$, d.f. = 3
upper limit of $\chi^2 = 14,212$
C = 0.260 with maximum C = 0.71
V = 0.27

SEVEN OR MORE VS. THREE TO SIX MISDEMEANOR EQUILIVANTS

$\chi^2 = 36.47$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 3402$
Phi-Square = 0.01
Tschruprow's T = 0.10

THREE TO SIX VS. ONE TO TWO MISDEMEANOR EQUILIVANTS

$\chi^2 = 35.46$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 3975$
Phi-Square = 0.01
Tschruprow's T = 0.10

ONE TO TWO VS. NO PRIOR RECORD

$\chi^2 = 194.26$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 10810$
Phi-Square = 0.02
Tschruprow's T = 0.13

DISPLAY ELEVEN

CHI-SQUARE TESTS OF CLIENT AGE INDEX REVISIONS
Age Range by Case Outcome

TOTAL INDEX

16-19 years old
vs. 20-35 years old
vs. 36 years and older
 $\chi^2 = 223.87$, $p < .001$, d.f. = 2
upper limit of $\chi^2 = 14,235$
C = 0.12 with maximum C = 0.71
V = 0.13

16 - 19 YEARS VS. 20 - 35 YEARS

$\chi^2 = 91.32$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 12,262$
Phi-Square = 0.01
Tschruprow's T = 0.09

20 - 35 YEARS VS. 36 YEARS AND OLDER

$\chi^2 = 62.22$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 8,508$
Phi-Square = 0.01
Tschruprow's T = 0.09

DISPLAY TWELVE

EDUCATIONAL LEVEL AND OUTCOME RATES

EDUCATIONAL LEVEL	TOTAL CASES	NUMBER SUCCESSFUL	PERCENT SUCCESSFUL	NUMBER FAILURE	PERCENT FAILURE
Less than 8th	691	545	78.9	146	21.1
8th Grade	1120	785	70.1	335	29.9
9th Grade	1888	1269	67.2	619	32.8
10th Grade	2372	1760	74.2	612	25.8
11th Grade	2482	1979	79.7	503	20.3
H.S. Grad/G.E.D.	3511	2993	85.3	518	14.7
Post H.S.	1680	1510	89.9	170	10.1
Post H.S. Completed	543	503	92.6	40	7.4
TOTAL*	14287	11344		2943	

*Educational level data was not available for 13 of the 14,300 cases.

DISPLAY THIRTEEN

CHI-SQUARE TESTS OF EDUCATION INDEX REVISIONS
Educational Level by Case Outcome

TOTAL INDEX

8th - 10th Grade
vs. 11th, LT 8th Grade
vs. H.S. (or G.E.D.)
vs. Post High School
 $\chi^2 = 480.80$, $p < .001$, d.f. = 3
upper limit of $\chi^2 = 14,287$
 $C = 0.180$ with maximum $C = 0.71$
 $V = 0.183$

8th - 10th GRADE VS. 11th, LT 8th GRADE

$\chi^2 = 78.13$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 8,553$
Phi-Square = 0.01
Tschruprow's T = 0.10

11th, LT 8th GRADE vs. H.S. (or G.E.D.)

$\chi^2 = 34.13$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 6,684$
Phi-Square = 0.005
Tschruprow's T = 0.07

H.S. (OR G.E.D.) VS. POST HIGH SCHOOL

$\chi^2 = 34.36$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 5,734$
Phi-Square = 0.006
Tschruprow's T = 0.08

DISPLAY FOURTEEN

EMPLOYMENT RELATED ACTIVITIES AND OUTCOME RATES

EMPLOYMENT ACTIVITY SCORE	TOTAL CASES	NUMBER SUCCESSFUL	PERCENT SUCCESSFUL	NUMBER FAILURE	PERCENT FAILURE
0	1685	1147	68.1	538	31.9
0.5	76	53	69.7	23	30.3
1.0	916	602	65.7	314	34.3
1.5	98	63	64.3	35	35.7
2.0	976	672	68.9	304	31.1
2.5	59	48	81.4	11	18.6
3.0	1772	1326	74.8	446	25.2
3.5	58	41	70.7	17	29.3
4.0	1174	870	74.1	304	25.9
4.5	80	61	76.3	19	23.7
5.0	1666	1373	82.4	293	17.6
5.5	146	115	78.8	31	21.2
6.0	4899	4360	89.0	539	11.0
6.5	75	68	90.7	7	9.3
7.0	236	205	86.9	31	13.1
7.5	44	38	86.4	6	13.6
8.0	194	183	94.3	11	5.7
8.5	22	19	86.4	3	13.6
9.0	99	91	91.9	8	8.1
TOTAL*	14275	11335		2940	

*Employment data was not available for 25 of the 14,300 cases.

DISPLAY FIFTEEN

CHI-SQUARE TESTS OF EMPLOYMENT RELATED ACTIVITIES INDEX
Activity Level by Case Outcome

TOTAL INDEX

zero to two points
vs. 2.5 to four points
vs. 4.5 to 5.5 points
vs. six or more points
 $\chi^2 = 689.71$, $p < .001$, d.f. = 3
upper limit of $\chi^2 = 14,275$
C = 0.215 with maximum C = 0.71
V = 0.22

ZERO TO TWO POINTS VS. 2.5 TO FOUR POINTS

$\chi^2 = 39.24$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 6814$
Phi-Square = 0.01
Tschruprow's T = 0.08

2.5 TO FOUR POINTS VS. 4.5 TO 5.5 POINTS

$\chi^2 = 35.29$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 4955$
Phi-Square = 0.01
Tschruprow's T = 0.08

4.5 TO 5.5 POINTS VS. SIX OR MORE POINTS

$\chi^2 = 67.79$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 7461$
Phi-Square = 0.01
Tschruprow's T = 0.10

DISPLAY SIXTEEN

ALCOHOL ABUSE AND CASE OUTCOME RATES

ALCOHOL SCORE	TOTAL CASES	NUMBER SUCCESSFUL	PERCENT SUCCESSFUL	NUMBER FAILURE	PERCENT FAILURE
0 (serious current problem)	1138	755	66.3	383	33.7
3 (moderate current problem)	984	707	71.8	277	28.2
5 (prior or minor problem)	1756	1323	75.3	433	24.7
7 (no problem)	10233	8410	82.2	1823	17.8
TOTAL*	14111	11195		2916	

*Alcohol abuse data was not available for 189 of the 14,300 cases.

DISPLAY SEVENTEEN

CHI-SQUARE TESTS OF ALCOHOL ABUSE INDEX
Alcohol Score by Case Outcome

TOTAL INDEX (original)

0 (Serious Current Problem)
vs. 3 (Moderate Current Problem)
vs. 5 (Prior or Minor Problem)
vs. 7 (No Problem)
 $\chi^2 = 219.29$, $p < .001$, d.f. = 3
upper limit of $\chi^2 = 14,111$
C = 0.124 with maximum C = 0.71
V = 0.125

MODERATE CURRENT PROBLEM (3) VS. PRIOR OR MINOR PROBLEM (5)

$\chi^2 = 3.99$, d.f. = 1 non-significant

SERIOUS CURRENT PROBLEM (0) VS. MODERATE, PRIOR OR MINOR PROBLEM (3,5)

$\chi^2 = 23.61$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 3,878$
Phi-Square = 0.01
Tschruprow's T = 0.08

MODERATE, PRIOR OR MINOR PROBLEM (3,5) VS. NO PROBLEM

$\chi^2 = 90.18$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 12,973$
Phi-Square = 0.01
Tschruprow's T = 0.08

TOTAL INDEX (revised)

0 (Serious Current Problem)
vs. 3,5 (Moderate, Prior or Minor Problem)
vs. 7 (No Problem)
 $\chi^2 = 213.80$, $p < .001$, d.f. = 2
upper limit of $\chi^2 = 14,111$
C = 0.122 with maximum C = 0.71
V = 0.123

DISPLAY EIGHTEEN

DRUG ABUSE AND CASE OUTCOME RATES

<u>DRUG SCORE</u>	<u>TOTAL CASES</u>	<u>NUMBER SUCCESSFUL</u>	<u>PERCENT SUCCESSFUL</u>	<u>NUMBER FAILURE</u>	<u>PERCENT FAILURE</u>
0 (serious current problem)	559	327	58.5	232	41.5
3 (moderate current problem)	632	423	66.9	209	33.1
5 (prior or minor problem)	1544	1119	72.5	425	27.5
7 (no problem)	11387	9338	82.0	2049	18.0
TOTAL*	14122	11207		2915	

*Drug abuse data was not available for 178 of the 14,300 cases.

DISPLAY NINETEEN

CHI-SQUARE TESTS OF DRUG ABUSE INDEX
Drug Score by Case Outcome

TOTAL INDEX (original)

0 (Serious Current Problem)
vs. 3 (Moderate Current Problem)
vs. 5 (Prior or Minor Problem)
vs. 7 (No Problem)
 $\chi^2 = 303.28$, $p < .001$, d.f. = 3
upper limit of $\chi^2 = 14,122$
C = 0.145 with maximum C = 0.71
V = 0.146

MODERATE CURRENT PROBLEM (3) VS. PRIOR OR MINOR PROBLEM (5)

$\chi^2 = 6.70$, d.f. = 1, non-significant

SERIOUS CURRENT PROBLEM (0) VS. MODERATE, PRIOR, OR MINOR PROBLEM (3,5)

$\chi^2 = 31.43$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 2,735$
Phi-Square = 0.01
Tschurprow's T = 0.11

MODERATE, PRIOR, OR MINOR PROBLEM (3,5) VS. NO PROBLEM(7)

$\chi^2 = 143.64$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 13,563$
Phi-Square = 0.01
Tschurprow's T = 0.10

TOTAL INDEX (revised)

0 (Serious Current Problem)
vs. 3,5 (Moderate, Prior or Minor Problem)
vs. 7 (No Problem)
 $\chi^2 = 292.99$, $p < .001$, d.f. = 2
upper limit of $\chi^2 = 14,122$
C = 0.143 with maximum C = 0.71
V = 0.144

DISPLAY TWENTY

MENTAL HEALTH PROBLEMS AND CASE OUTCOME RATES

MENTAL HEALTH SCORE	TOTAL CASES	NUMBER SUCCESSFUL	PERCENT SUCCESSFUL	NUMBER FAILURE	PERCENT FAILURE
0 (serious current problem)	285	180	63.2	105	36.8
3 (moderate current problem)	266	182	68.4	84	31.6
5 (prior or minor problem)	374	267	71.4	107	28.6
7 (no problem)	7003	5643	80.6	1360	19.4
TOTAL*	7928	6272		1656	

*Mental health data was not available for 6,372 of the 14,300 cases.

DISPLAY TWENTY-ONE

CHI-SQUARE TESTS OF MENTAL HEALTH INDEX
Mental Health Score by Case Outcome

TOTAL INDEX (original)

0 (Serious Current Problem)
vs. 3 (Moderate Current Problem)
vs. 5 (Prior or Minor Problem)
vs. 7 (No Problem)
 $\chi^2 = 83.27$, $p < .001$, d.f. = 3
upper limit of $\chi^2 = 7,928$
C = 0.102 with maximum C = 0.71
V = 0.102

MODERATE CURRENT PROBLEM (3) VS. PRIOR OR MINOR PROBLEM(5)

$\chi^2 = 0.77$, d.f. = 1, non-significant

SERIOUS CURRENT PROBLEM (0) VS. MODERATE, PRIOR OR MINOR PROBLEM (3,5)

$\chi^2 = 4.43$, d.f. = 1, non-significant

SERIOUS, MODERATE, PRIOR, MINOR PROBLEM (0,3,5) VS. NO PROBLEM (7)

$\chi^2 = 78.63$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 7,928$
Phi-Square = 0.01
Tschruprow's T = 0.10

DISPLAY TWENTY-TWO

EXISTING FAMILY STRUCTURE AND CASE OUTCOME RATES

<u>FAMILY STRUCTURE SCORE</u>	<u>TOTAL CASES</u>	<u>NUMBER SUCCESSFUL</u>	<u>PERCENT SUCCESSFUL</u>	<u>NUMBER FAILURE</u>	<u>PERCENT FAILURE</u>
1 (resides away from family with few or no ties)	1047	703	67.1	344	32.9
2 (resides away from family with some ties)	2386	1821	76.3	565	23.7
3 (separated/divorced but caring for or supporting child)	1060	922	86.9	138	13.1
3½ (single emancipated with strong ties)	452	363	80.3	89	19.7
4 (resides in one parent home or married without children and supports spouse)	3195	2342	73.3	853	26.7
6 (resides in two parent home or married with children and supports family)	6069	5127	84.5	942	15.5
TOTAL*	14209	11278		2931	

*Family Structure data was not available for 91 of the 14,300 cases.

DISPLAY TWENTY-THREE

CHI-SQUARE TESTS OF THE FAMILY STRUCTURE INDEX
Existing Family Structure Score by Case Outcome

TOTAL INDEX

1 (resides away from family with few or no family ties)
vs. 2, 3½, 4 (resides away from family with some ties or resides in one parent home)
vs. 3, 6 (resides with spouse or separated/divorced but caring for/supporting children or resides in two parent household)
 $\chi^2 = 296.56$, $p < .001$, d.f. = 2
upper limit of $\chi^2 = 14,209$
C = 0.143 with maximum C = 0.71
V = 0.144

RESIDES AWAY FROM FAMILY WITH FEW OR NO FAMILY TIES (1) VS. RESIDES AWAY FROM FAMILY WITH SOME TIES OR RESIDES IN ONE PARENT HOME (2, 3½, 4)

$\chi^2 = 28.42$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 7,080$
Phi-Square = 0.004
Tschruprow's T = 0.063

RESIDES AWAY FROM FAMILY WITH SOME TIES OR RESIDES IN ONE PARENT HOME (2, 3½, 4) VS. RESIDES WITH SPOUSE OR SEPARATED/DIVORCED BUT CARING FOR/SUPPORTING CHILDREN OR RESIDES IN TWO PARENT HOME (3,6)

$\chi^2 = 188.16$, $p < .001$, d.f. = 1
upper limit of $\chi^2 = 13,162$
Phi-Square = 0.014
Tschruprow's T = 0.120

SUMMARY OF POSITIVE AND NEGATIVE POINT DEVIATIONS

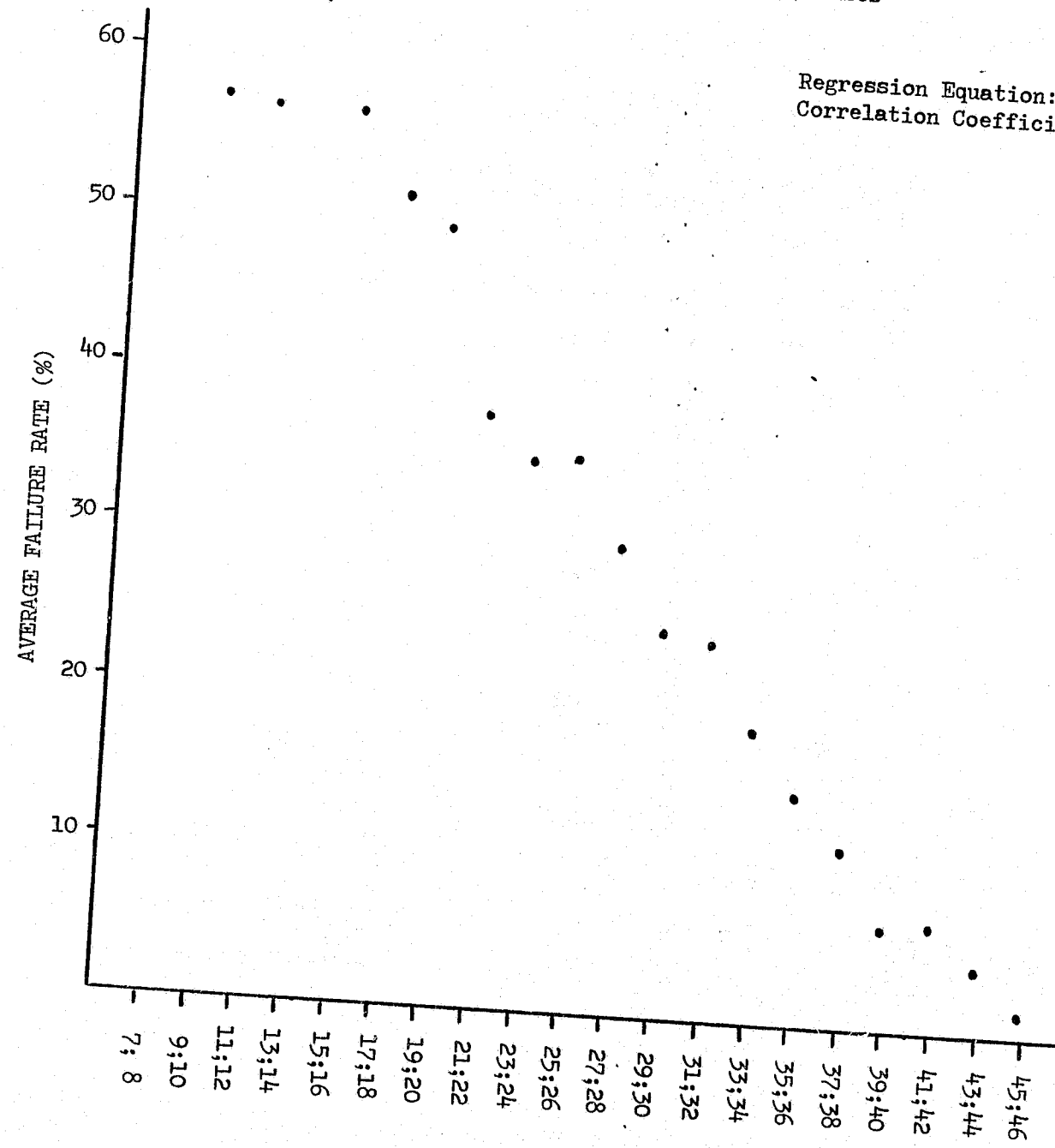
DISPLAY TWENTY-SEVEN

POSITIVE DEVIATIONS N= 4442			NEGATIVE DEVIATIONS N= 2291		
(+) Point Changes	N=3563 Success	N=879 Failure	(-) Point Changes	N=1736 Success	N=555 Failure
+ 1	959	249	- 1	760	220
+ 2	793	217	- 2	481	151
+ 3	646	145	- 3	295	109
+ 4	460	116	- 4	129	50
+ 5	316	65	- 5	47	19
+ 6	189	43	- 6	19	5
+ 7	103	28	- 7	4	1
+ 8	51	13	- 8	1	-
+ 9	24	-	- 9	-	-
+10	16	3	-10	-	-
+11	4	-	-11	-	-
+12	2	-	-12	-	-
TOTALS	3563	879	TOTALS	1736	555

Failure Cases with no change = 278
 Success Cases with no change = 928
 Total Cases with no change = 1206
 Total Success = 6227
 Total Failure = 1712
 Grand Total = 7939

DISPLAY TWENTY-EIGHT

RELATIONSHIP BETWEEN REVISED TOTAL RISK SCORE AND PROBATIONER FAILURE
For a Sample of 7,957 Cases



Regression Equation: $Y = -1.944x + 85.22$
Correlation Coefficient: -0.9828

TOTAL RISK SCORES AT
TWO POINT INTERVALS

DISPLAY TWENTY-NINE

SUMMARY OF STATISTICAL TESTS

Total Cases = 7957	Mean Risk Score = 32.30
Total Failure Cases = 1731	Mean Risk Score = 26.58
Total Success Cases = 6226	Mean Risk Score = 33.87

Blocked (2 point) Risk Score Intervals

regression line: failure (%) = -1.944 (risk score) + 85.22
correlation coefficient: $r = -0.9828$ ($r^2 = .966$)

Single Point Risk Score Intervals

risk score related to outcome (hypothesis: p failure % = .2175)
 $\chi^2 = 934.41$, d.f. = 37, $p < .001$, upper limit of $\chi^2 = 7957$
regression line: failure (%) = -1.763 (risk score) + 78.46
correlation coefficient: -0.9652 ($r^2 = .932$)

DISPLAY THIRTY

FREQUENCY DISTRIBUTION OF SUCCESS AND FAILURE CASES FOR EACH REVISED TOTAL RISK SCORE

TOTAL RISK SCORE	FAILURE CASES	SUCCESS CASES	TOTAL CASES
5	1	1	2
6	3	0	3
7	5	0	5
8	16	5	21
9	5	5	10
10	18	12	30
11	13	17	30
12	36	20	56
13	22	22	44
14	42	14	56
15	48	36	84
16	43	33	76
17	40	44	84
18	55	46	101
19	62	61	123
20	58	62	120
21	53	79	132
22	56	101	157
23	65	119	184
24	57	109	166
25	69	118	187
26	60	118	178
27	77	149	226
28	62	177	239
29	66	188	254
30	78	250	328
31	66	201	267
32	81	261	342
33	77	306	383
34	58	288	346
35	65	355	420
36	61	378	439
37	46	336	382
38	37	303	340
39	35	426	461
40	15	294	309
41	42	417	459
42	16	278	294
43	12	272	284
44	8	194	202
45	2	68	70
46	0	63	63

CONNECTICUT JUDICIAL DEPARTMENT: OFFICE OF ADULT PROBATION

JD-AP-8
REV. 1-81

CASE MANAGEMENT/RISK PREDICTIVE INSTRUMENT DISPLAY THIRTY-ONE

Client's Name (First and Last) _____ State Number (full) _____

Officers Last Name Only _____ Date of Probation (Include projected termination date) _____

FROM: [] [] [] [] TO: [] [] [] []

Offense(s) (List all offenses for which probation was imposed) _____ Client Ethnicity (Check one box)

1 = White 3 = Hispanic 5 = Amer. Ind.
2 = Black 4 = Asian 6 = Other

CRIMINAL INDEX

1. SEVERITY OF INSTANT OFFENSE:

FELONY = 1 point
MISDEMEANOR = 3 points

2. PRIOR CRIMINAL RECORD:

No Prior Record = 12 points
1-2 Priors (Misd.) = 9 points
3-6 Priors (Misd.) = 4 points
7 or more (Misd.) = 0 points

3. AGE:

16-19 years = 1 point
20-35 years = 2 points
36 and older = 4 points

- Offense score is 1 or 3 points.
- If multiple offenses or counts are involved, rate most serious offense only.
- Enter score in box at left.

- Include all prior convictions, Youthful Offender Adjudications and A/R Referrals.
- Convert felonies to misdemeanors (1 Fel. = 3 Misd.)
- For 16-19 year olds include serious juvenile adjudications:
Juv. Probation = 3 Misd. Juv. Commit = 6 Misd.
- Enter score in box at left.

- Indicate exact age at referral in box to right of correct age range.
- Enter appropriate age range score in box at left.

BEHAVIORAL AND ENVIRONMENTAL ADJUSTMENT INDEX

4. EXTENT OF EDUCATION:

8th, 9th or 10th = 1 11th or less than 8th = 3 High School Grad. or G.E.D. = 5 Post H.S. Educ. or Training = 6

5. EMPLOYMENT RELATED ACTIVITIES DURING PAST 12 MONTHS:

	FULL TIME	PART TIME	MONTHS OF ACTIVITY	
			POINTS	POINTS
EMPLOYMENT.....	<input type="checkbox"/>	<input type="checkbox"/>	0-4 Months	1
SCHOOL.....	<input type="checkbox"/>	<input type="checkbox"/>	5-8 Months	4
TRAINING.....	<input type="checkbox"/>	<input type="checkbox"/>	9-11 Months	5
HOMEMAKING.....	<input type="checkbox"/>	<input type="checkbox"/>	12 Months	7
RESID. PROGRAM.....	<input type="checkbox"/>	<input type="checkbox"/>		
				1/2
				2
				2 1/2
				3 1/2

SOC. SEC./PENSION.....

6. ALCOHOL, DRUG &/or MENTAL HEALTH PROBLEMS:

ALCOHOL 0 4 8
DRUGS
MENTAL HEALTH

0 = Serious problem
4 = Moderate/minor problem
8 = No problem

- Check all appropriate boxes and enter total score at left.
- Maximum score is 7 points.

- Check boxes to indicate severity of problem for each area.
- No problem areas, enter 8.
- One problem area, enter score (0 or 4) describing severity.
- Two problems, enter lowest score.
- Three problems, enter 0.

7. EXISTING FAMILY STRUCTURE:

Resides away from family with few or no family ties..... 1 point
Resides away from family with some ties or resides in one parent home..... 4 points
Resides with spouse or separated/divorced but caring for/supporting children or resides in two parent household..... 6 points

OUTCOME INDEX

TOTAL RISK PREDICTIVE SCORE: (Add items 1. thru 7.)

TOTAL B.E.A.I. SCORE: (Add items 4. thru 7.)

MODEL OF RECORD (Check one box)

I
II
III

FINAL OUTCOME INDICES (CHECK ONE BOX UPON DISCHARGE)

Y.O. and Regular Probation Cases	Accelerated Rehab. Cases
<input type="checkbox"/> 1a. Court determination of V/P: Probation Revoked.	<input type="checkbox"/> 1. Fraudulent A/R application: Officer's investigation reveals case was not legally eligible for treatment under A/R act.
<input type="checkbox"/> 1b. Court determination of V/P: Probation Continued.	<input type="checkbox"/> 2. Unsatisfactory report submitted to court: defendant put to plea.
<input type="checkbox"/> 2. Officer detected violation, made application for warrant or otherwise presented case as violator but for any of several reasons the Court did not find probationer in violation of probation.	<input type="checkbox"/> 3. Unsatisfactory report submitted to court: charges dismissed.
<input type="checkbox"/> 3. Conviction for subsequent offense committed during probation term resulting in incarceration (SONC). No warrant or V/P proceedings initiated by officer.	<input type="checkbox"/> 4. Satisfactory completion of supervision term: charges dismissed.
<input type="checkbox"/> 4. Conviction for subsequent offense committed during probation term not resulting in incarceration. No action on violation initiated by officer.	
<input type="checkbox"/> 5. No conviction while on probation.	

END