186

SALIENT FACTOR SCORES: AN AID TO ADMINISTRATIVE PREDICTION

Prepared by:

Daniel P. LeClair, Ph.D.
Deputy Director of
Research

Charles Metzler
Director of Data
Processing

Joseph Landolfi
Program Development
Specialist

Massachusetts Department of Correction

William T. Hogan, Jr.
Commissioner

February, 1980

PUBLICATION #11799
Approved by Alfred C. Holland, State Purchasing Agent

SALIENT FACTOR SCORES:
AN AID TO ADMINISTRATIVE PREDICTION

Over the past 50 years criminological research has invested a considerable amount of resources in the area of prediction studies. Among the earliest efforts in this area was the work of S.B. Warner in the 1920's under the sponsorship of the then Commissioner of Correction in the state of Massachusetts Sanford Bates.[1] Soon to follow was a series of studies produced by Hart, Burgess, the Gluecks, and Vold. Building on this base was the work of Ohlin, Glaser, MacNaughton-Smith, Mannheim, Wilkins, and Gottfredson.[2] These studies, spanning a period of 50 years, are characterized by increasing increments of mathematical and statistical sophistication. Additionally, as the prediction techniques approach the higher levels of methodological sophistication, a dependence on modernized computer technology concurrently occurs. Thus, at the present time a wide variety of prediction

---

[1] Mannheim and Wilkins, Prediction Methods in Relation to Borstal Training. London: Her Majesty's Stationery Office, 1955, ppl.

[2] For a complete review of the work of the above cited authors, see Mannheim and Wilkins, Ibid. pp 1-27; and Simon, Prediction Methods in Criminology. London: Her Majesty's Stationery Office, 1971, pp. 30-57.

devices ranging from simple hand tabulations using the Chi Square statistic to highly developed computerized tabulations using statistical techniques such as multiple regression are available in the correctional field. Despite this situation, neither the availability nor the increased variety, nor the widening span in the levels of sophistication has necessarily led to an increased usage of prediction devices in the correctional decision making process.

Perhaps an explanation for the apparent non-usage of the prediction instruments emerges from the very situation of their increased mathematical and statistical sophistication. It is suggested that the more sophisticated techniques are difficult for decision makers to understand and use, and more importantly, that there is little evidence that they offer greater accuracy. For example, United States Board of Parole researchers, Hoffman and Beck, cite a study by Simon (1971) which concludes that one of the older and simplest methods - known as the Burgess Method - tends to predict as well on validation as the more mathematically sophisticated methods such as multiple regression configural analysis.[3] A similar study by Wilbanks and Hindelang (1972) is cited as producing

[3]Hoffman and Beck, "Parole Decision-Making: A Salient Factor Score." Journal of Criminal Justice, Vol. II, 1974, pp. 195-206.

a similar conclusion.

The Salient Factor Score was recently introduced by researchers at the United States Board of Parole as a prediction instrument that has the unique feature of being easy to understand and use as well as being as accurate a measure on validation as other more complex prediction methods currently available. The instrument is basically a derivation of the Burgess Method with only minor modifications. After applying the instrument to predict the post-conviction behavior of federal prison parolees, the researchers concluded that the method predicted well enough to justify implementation and proved to be administratively feasible in operation.

The present study represents an attempt at testing the feasibility of the use of the Salient Factor Score technique as an aid in administrative decision making in the Massachusetts Department of Correction. In Massachusetts, a specific concern of correctional officials has been the need for prediction aides in classification decisions such as placing individuals in lower security institutions or selecting individuals for community treatment programs such as home furlough and pre-release centers. In this study, two distinct outcome situations are involved: (1) recidivism risk potential and, (2) pre-release program non-completion risk potential. Additionally, three distinct junctures in the career of the

incarcerated offender are of concern: (1) the reception/ diagnosis stage, (2) the intermediate period of incarceration, and (3) the releasing stage.

Thus separate Salient Factor Scores will be developed for predicting the two outcome situations, and separate Salient Factor Scores will be developed for appropriate junctures of each of these two outcome situations. Part I of the study will deal with recidivism prediction and Part II will deal with program completion risk prediction.

PART I

DEVELOPMENT OF SALIENT FACTOR SCORES FOR RECIDIVISM PREDICTION

Samples: In developing the instrument for predicting redicivism risk potential, two samples were drawn. Sample I consisted of the population of all releases from Massachusetts Correctional Institutions during the year 1975 (N=806). This population formed the construction sample from which Salient Factor Scores were developed. Sample II consisted of all releases from Massachusetts Correctional Institutions during the year 1976 (N=925). This second population was used for the purposes of validating the Salient Factor Scores developed from the construction sample, and is thus referred to as the validation sample.

Procedure for Salient Factor Score Construction: For each individual included in the construction sample (N=806), thirty-six items of information that were characteristic of personal background, criminal career, and institutional history were selected from the department's computerized offender-based information system. Each of these thirty-six variables was cross-tabulated with the criterion measure - recidivism.

A recidivist was defined as any subject returned to a

federal or state correctional institution or to a county jail or house of correction for 30 days or more as a result of either a parole violation or a new court sentence. The follow-up period was one year from the date of the subject's release from prison to the community.

Items found to be predictive of outcome after release (X^2 test at .05 probability level) were selected as possible "Salient Factors" in the prediction instrument. Following the procedure used by Hoffman and Beck (1974), selected items though predictive could subsequently be excluded for a variety of reasons. Examples of such reasons are as follows: items judged to pose ethical problems for use in individual classification decisions (eg., prior arrests not leading to conviction); items not occurring frequently enough to be applicable (eg., escape history); items appearing to substantially overlap with other items already included (eg., duration of longest job held and duration of employment in most skilled job are highly correlated); and items no longer relevant to future cases (eg., prior arrests for drunkenness currently decriminalized). The resultant "factors" chosen were therefore a combination of statistical findings and the researchers judgements.

From the pool of thirty-six variables, eleven items were chosen through the process of elimination described above. A mechanism was provided to allow for the construction of three

separate Salient Factor Scores: a pre-incarceration score, an intermediate-incarceration score, and a post-incarceration score. Of the original eleven items selected; seven of the items represented information known at the time of incarceration, eight known at the intermediate stage of incarceration and the full eleven known at the time of release. Therefore, a separate Salient Factor Score can be computed for an individual at each of these three periods of incarceration corresponding to three separate decision situations. The pre-incarceration score would appropriately be used for classification decisions made at the reception and diagnostic stage. The intermediate-incarceration score would be used for subsequent classification decisions, such as movement to lower security institutions. Finally, the post-incarceration score would be used in decisions at the completion of the period of incarceration, such as decisions regarding suitability for parole.

In Table I, below, the eleven items selected for the Salient Factor Score are displayed. Following the Burgess method, each of the eleven items are dichotomized for scoring purposes so that each item is scored 0 or 1. The individual item scores are summed thus forming the final Salient Factor Score. The higher the final score, the higher the probability of a predicted successful outcome.

TABLE I

SALIENT FACTOR SCORE ITEMS

I.

	1	0	X^2	Significance Level
% Recidivists	16% N=454	25% N=352	11.02	.001

Pre-Incarceration ☐ Intermediate ☐ Post Incarceration ☐

Time on Job of Longest Duration
Five months or more = 1
Otherwise = 0

II.

	1	0	X^2	Significance Level
% Recidivists	14% N=407	26% N=399	18.33	.001

Pre-Incarceration ☐ Intermediate ☐ Post Incarceration ☐

Known History of Drug Use
None = 1
Otherwise = 0

III.

	1	0	X^2	Significance Level
% Recidivists	17% N=601	29% N=205	14.85	.001

Pre-Incarceration ☐ Intermediate ☐ Post Incarceration ☐

Incarcerated as a Juvenile
None = 1
Otherwise = 0

IV.

	1	0	X^2	Significance Level
% Recidivists	17% N=509	25% N=297	8.19	.01

Pre-Incarceration ☐ Intermediate ☐ Post Incarceration ☐

Prior House of Correction Incarcerations
None = 1
Otherwise = 0

V.

	1	0	X^2	Significance Level
% Recidivists	8% N=596	24% N=210	27.12	.001

Pre-Incarceration ☐ Intermediate ☐ Post Incarceration ☐

Age at First Arrest
- Age 19 or Older = 1
- Age 18 or Less = 0

VI.

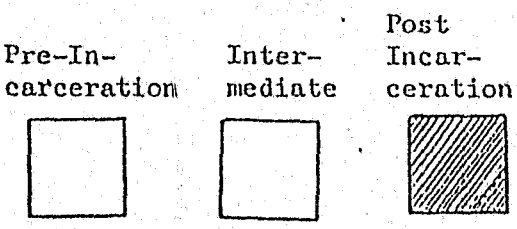
	1	0	X^2	Significance Level
% Recidivists	15% N=302	23% N=504	6.80	.01

Pre-Incarceration ☐ Intermediate ☐ Post Incarceration ☐

Commitment Institution
- Walpole = 1
- Otherwise = 0

VII.

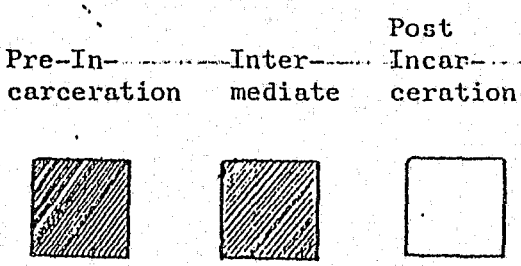
	1	0	X^2	Significance Level
% Recidivists	12% N=272	24% N=534	17.31	.001



Age at Incarceration
Age 27 or Older = 1
Under Age 27 = 0

VIII.

	1	0	X^2	Significance Level
% Recidivists	13% N=289	24% N=517	11.84	.001

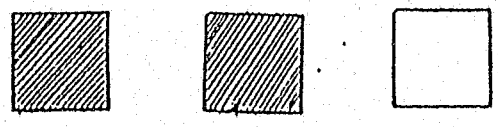


Length of Time Served, Present Incarceration
Twenty-one months or more = 1
Twenty months or less = 0

IX.

	1	0	X^2	Significance Level
% Recidivists	9% N=210	24% N=596	21.21	.001

Pre-Incarceration | Intermediate | Post Incarceration

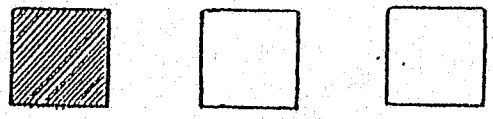


Age at Release
- Age 31 or Older = 1
- Age 30 or Under = 0

X.

	1	0	X^2	Significance Level
% Recidivists	12% N=427	28% N=379	32.49	.001

Pre-Incarceration | Intermediate | Post Incarceration

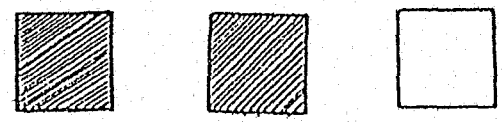


Number of Successful Furloughs
- Two or More = 1
- One or None = 0

XI.

	1	0	X^2	Significance Level
% Recidivists.	15% N=444	26% N=362	16.15	.001

Pre-In-carceration | Inter-mediate | Post Incar-ceration

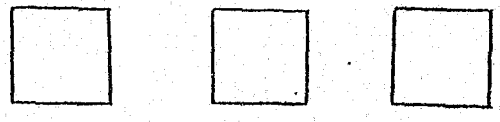


Releasing Institution

Norfolk, Framingham, Forestry, Pre-Release = 1

Concord and Walpole = 0

Pre-In-carceration | Inter-mediate | Post Incar-ceration



TOTAL SCORES

In order to render finalized scores interpretable for operational use, collapsed categories of differential risk levels were constructed. The collapsed categories were derived from the frequency distributions of each individual member of the construction sample. (see Appendix III) Tables II through IV below, display the collapsed scores for each of the three Salient Factor Scores developed for recidivism prediction.

TABLE II

DIFFERENTIAL RISK CATEGORIES - RECIDIVISM PREDICTION: PRE-INCARCERATION

Salient Factor Score	Category	Recidivism Probability
5 to 7	Low Risk	6%
3 to 4	Neutral	19%
0 to 2	High Risk	33%

TABLE III

DIFFERENTIAL RISK CATEGORIES - RECIDIVISM PREDICTION: INTERMEDIATE INCARCERATION

Salient Factor Score	Category	Recidivism Probability
6 to 8	Low Risk	4%
4 to 5	Medium Low Risk	15%
2 to 3	Medium High Risk	27%
0 to 1	High Risk	48%

TABLE IV

DIFFERENTIAL RISK CATEGORIES - RECIDIVISM PREDICTION: POST-INCARCERATION

Salient Factor Score	Category	Recidivism Probability
8 to 10	Low Risk	2%
5 to 7	Medium Low Risk	13%
3 to 4	Medium High Risk	24%
0 to 2	High Risk	42%

Procedure for Score Validation: In order to validate the Salient Factor Scores obtained through the procedure outlined above, the score was applied to the validation sample. A Salient Factor Score was computed for each individual in the validation sample. A point-biserial correlation was run between the Salient Factor Score obtained and the criterion measure (recidivism) for each individual in this sample. A high point-biserial correlation would be evidence of score validation. Table V below summarizes the results of these computations for the three Salient Factor Scores tested:

TABLE V

POINT-BISERIAL CORRELATIONS FOR VALIDATION SAMPLE

Score		r
A.	Pre-Incarceration Score	.198
B.	Intermediate-Incarceration Score	.244
C.	Post-Incarceration Score	.244

We conclude that the resultant correlations are quite low, below the .05 probability level, and that evidence of validation is quite weak. Under these circumstances, use of the developed Salient Factor Scores for recidivism prediction

should proceed with caution. A fuller discussion of the implications of these findings will occur at the end of this report.

PART II

DEVELOPMENT OF SALIENT FACTOR SCORES FOR PRE-RELEASE COMPLETION PREDICTION

Samples: In developing the instrument for predicting the successful completion of pre-release placement, two samples were drawn. Sample I consisted of the population of all inmates in Massachusetts Correctional Institutions placed in pre-release centers during the year 1975 (N=565). This population formed the Construction Sample from which the Salient Factor Scores were developed. Sample II consisted of all inmates placed in pre-release centers during the year 1976 (N=807). This second population was used for the purposes of validating the Salient Factor Scores developed from the construction sample, and is thus referred to as the Validation Sample.

Procedure for Salient Factor Score Construction: Similar to the procedure outlined in Part I for each individual included in the construction sample (N=565), thirty-six items of information that were characteristic of personal background, criminal career, and institutional history were selected from the department's computerized offender-based information system. Each of these thirty-six variables was cross-tabulated with the criterion measure - successful completion

of the pre-release placement.

A successful completer was defined as a resident who successfully completed his or her stay at a pre-release facility and either (1) was released to the streets either by permit of the parole board or a certificate of discharge or; (2) was transferred out of a particular pre-release facility to another facility of the same or lower security level. A program non-completer was defined as any resident who did not complete his or her stay at a pre-release center but was instead returned to his or her sending institution or to an institution of higher security level.

The Salient Factor Score was constructed in the same manner described in Part I. From the pool of thirty-six variables, eight items were chosen through the process of elimination. In the case of pre-release program completion prediction two separate Salient Factor Scores were constructed: a pre-incarceration score and an intermediate-incarceration score. Of the original eight items selected; seven of the items represented information known at the time of incarceration and the full eight known at the intermediate stage of incarceration. Thus, two separate scores were constructed using the appropriate items corresponding to the two decision making situations. The pre-incarceration score would appropriately be used for classification decisions regarding potential risk for pre-release placement at the reception and

diagnostic state. The intermediate-incarceration score would be used for subsequent classification decisions such as at the admission stage of pre-release.

In Table VI, below, the eight items selected for the Salient Factor Scores are displayed. The method of scoring is the same as the method presented in Part I of this study. Similarly, the higher the final score, the higher the probability of predicted successful outcome.

TABLE VI

SALIENT FACTOR SCORE ITEMS

I.

	1	0	X^2	Significance Level
% Non-Completers	33% N=265	45% N=300	9.21	.01

Pre-Incarceration ☐ Intermediate ☐

Time at Most Skilled Position
7 or More Months = 1
6 or Less Months = 0

II.

	1	0	X^2	Significance Level
% Non-Completers	28% N=167	44% N=398	14.11	.001

Pre-Incarceration ☐ Intermediate ☐

Last Grade Completed
12 or More Grades = 1
11 or Less Grades = 0

III.

	1	0	X^2	Significance Level	Pre-In-carceration	Inter-mediate
% Non-Completers	34% N=376	50% N=189	12.53	.001		

Known History of Drug Use
- No Prior History of Heroin Use = 1
- Known History of Heroin Use = 0

IV.

	1	0	X^2	Significance Level	Pre-In-carceration	Inter-mediate
% Non-Completers	37% N=446	48% N=119	4.48	.01		

Prior Juvenile Incarcerations
- No Prior Juvenile Incarcerations = 1
- 1 or More Prior Incarcerations = 0

V.

	1	0	X^2	Significance Level
% Non-Completers	38% N=517	54% N= 48	4.74	.05

Pre-In-carceration ☐ Inter-mediate ☐

Prior State/Federal Incarcerations
2 or Less Incarcerations = 1
3 or More Incarcerations = 0

VI.

	1	0	X^2	Significance Level
% Non-Completers	25% N=150	45% N=415	18.73	.001

Pre-In-carceration ☐ Inter-mediate ☐

Age at First Arrest
20 or Older = 1
19 or Younger = 0

VII.

	1	0	X^2	Significance Level
% Non-Completers	35% N=314	45% N=251	5.02	.05

Pre-In-carceration ☐ Inter-mediate ☐

Committing Institution
Non-MCI-Concord Commitment = 1
MCI-Concord Commitment = 0

VIII.

	1	0	X^2	Significance Level
% Non-Completers	33% N=301	47% N=264	10.52	.01

Pre-In-carceration ▨ Inter-mediate ☐

Age at Pre-Release Admission
26 Years of Age or Older = 1
25 Years of Age or Younger = 0

TOTAL SCORES

Pre-Incarceration	Intermediate
☐	☐

In order to render finalized scores interpretable for operational use, collapsed categories of differential risk levels were constructed. The collapsed categories were derived from the frequency distributions of each individual member of the construction sample (see Appendix IV). Tables VII and VIII below, display the resultant collapsed scores for each of the two Salient Factor Scores developed for predicting successful pre-release completion.

TABLE VII

DIFFERENTIAL RISK CATEGORIES-COMPLETION/NON-COMPLETION PREDICTION PRE-INCARCERATION

SALIENT FACTOR SCORE	CATEGORY	FAILURE PROBABILITY
5 to 7	Low Risk	27%
2 to 4	Neutral	43%
0 to 1	High Risk	70%

TABLE VIII

DIFFERENTIAL RISK CATEGORIES-COMPLETION/NON-COMPLETION PREDICTION INTERMEDIATE INCARCERATION

SALIENT FACTOR SCORE	CATEGORY	FAILURE PROBABILITY
5 to 8	Low Risk	26%
2 to 4	Neutral	48%
0 to 1	High Risk	70%

Procedure for Score Validation: The obtained Salient Factor Scores were validated in the same manner as score validation presented in Part I of this report. The results of the point-biserial correlations are presented in Table IX below:

TABLE IX

POINT-BISERIAL CORRELATIONS FOR VALIDATION SAMPLE

Score		r
A.	Pre-Incarceration Score	.175
B.	Intermediate-Incarceration Score	.184

Again as in case for the Salient Factor Score construction in Part I, we conclude that the resultant correlations are quite low, below the .05 probability level, and that evidence of validation is quite weak. We stress the same need for caution in the use of these scores for completion/non-completion prediction.

SUMMARY AND CONCLUSION

In our study we have attempted to test the feasibility of constructing sets of Salient Factor Scores operationally useful for the classification decision-making process. Two distinct outcome situations were involved: (1) Recidivism risk potential and, (2) Pre-release program non-completion risk potential.

We were interested in developing instruments that would be predictive of these two outcome situations and that could be utilized at different junctures of the incarceration process. Three critical junctures were specified: (1) the reception/diagnostic stage, (2) the intermediate period of incarceration, and (3) the releasing stage.

Using a methodology and format closely mirroring the methodology and format utilized by researchers at the United States Board of Parole in their work on Salient Factor Scores, sets of scores were developed on the Massachusetts Department of Correction's inmate population. The resultant scores were then run through the validation process. It was found that evidence of validation was quite weak. We concluded that operational usage should proceed with extreme caution. Use of the scores when approaching the high and low risk extremes appear to be the most justifiable. In fact, the frequency distributions occurring in the original data sets

suggest that a disproportionate number of individual cases do fall in the median category. For this reason, it is the opinion of the researchers that evidence does not support operational use of the constructed scores except for experimental and exploratory purposes.

In reviewing the construction processes and the resultant validation procedures for the Salient Factor Scores, several suggestions for further research tasks became evident. Firstly, it is felt that an attempt at incorporating more data elements, especially those traditionally deemed useful in clinical decision making may increase the predictive power of the resultant instrument. Secondly, it is felt that a reduction in unknown data elements, inconsistent data elements, and inaccurate data elements may also contribute to a stronger instrument.

APPENDIX I

SALIENT FACTOR SCORING SHEETS
RECIDIVISM PREDICTION

SALIENT FACTOR SCORE SHEET

PRE-INCARCERATION

Case Name_____ Original Commitment Number_____

Item A..... ☐

Time on Job of Longest Duration

Five months or more	= 1
Otherwise	= 0

Item B..... ☐

Known History of Drug Use

None	= 1
Otherwise	= 0

Item C..... ☐

Incarcerated As A Juvenile

None	= 1
Otherwise	= 0

Item D..... ☐

Prior House of Correction Incarcerations

None	= 1
Otherwise	= 0

Item E..... ☐

Age at First Arrest

Age 19 or older	= 1
Age 18 or less	= 0

Item F..... ☐

Commitment Institution

Walpole	= 1
Otherwise	= 0

Item G..... ☐

Age at Incarceration

Age 27 or older	= 1
Under age 27	= 0

TOTAL SCORE..... ☐

SALIENT FACTOR SCORE SHEET

INTERMEDIATE INCARCERATION

Case Name_____ Original Commitment Number_____

Item A..... ☐

Time on Job of Longest Duration

Five months or more	= 1
Otherwise	= 0

Item B..... ☐

Known History of Drug Use

None	= 1
Otherwise	= 0

Item C..... ☐

Incarcerated As A Juvenile

None	= 1
Otherwise	= 0

Item D..... ☐

Prior House of Correction Incarcerations

None	= 1
Otherwise	= 0

Item E..... ☐

Age at First Arrest

Age 19 or older	= 1
Age 18 or less	= 0

Item F..... ☐

Commitment Institution

Walpole	= 1
Otherwise	= 0

Item G..... ☐

Age at Incarceration

Age 27 or older	= 1
Under age 27	= 0

Item H..... ☐

Number of Successful Furloughs

Two or more	= 1
One or none	= 0

TOTAL SCORE..... ☐

SALIENT FACTOR SCORE SHEET

POST INCARCERATION

Case Name_____ Original Commitment Number_____

Item A..... ☐

Time on Job of Longest Duration

Five months or more	= 1
Otherwise	= 0

Item B..... ☐

Known History of Drug Use

None	= 1
Otherwise	= 0

Item C..... ☐

Incarcerated as a Juvenile

None	= 1
Otherwise	= 0

Item D..... ☐

Prior House of Correction Incarcerations

None	= 1
Otherwise	= 0

Item E..... ☐

Age at First Arrest

Age 19 or older	= 1
Age 18 or less	= 0

Recidivism Prediction

Item F..... ☐

Commitment Institution

Walpole	= 1
Otherwise	= 0

Item G..... ☐

Length of Time Served, Present Incarceration

Twenty-one months or more	= 1
Twenty months or less	= 0

Item H..... ☐

Age at Release

Age 31 or older	= 1
Age 30 or under	= 0

Item I..... ☐

Number of Successful Furloughs

Two or more	= 1
One or none	= 0

Item J..... ☐

Releasing IUstitution

Norfolk, Framingham, Forestry, Pre-Release	= 1
Concord and Walpole	= 0

TOTAL SCORES..... ☐

APPENDIX II

SALIENT FACTOR SCORING SHEETS
PRE-RELEASE PROGRAM COMPLETION/NON-COMPLETION PREDICTION

Completion/Non-Completion Prediction

SALIENT FACTOR SCORE SHEET

PRE-INCARCERATION

Case Name_____ Original Commitment Number_____

Item A..... ☐

Time at Most Skilled Position

Seven or more months = 1
Otherwise = 0

Item B..... ☐

Last Grade Completed

12th grade or more = 1
Otherwise = 0

Item C..... ☐

Known History of Drug Use

No prior history of heroin use = 1
Otherwise = 0

Item D..... ☐

Prior Juvenile Incarcerations

No prior juvenile incarcerations = 1
Otherwise = 0

Item E..... ☐

Prior State or Federal Incarcerations

Two or less incarcerations = 1
Otherwise = 0

Completion/Non-Completion Prediction

Item F..... ☐

Age at First Arrest

20 years or older = 1
Otherwise = 0

Item G..... ☐

Committing Institution

Non MCI-Concord commitment = 1
Otherwise = 0

TOTAL SCORE..... ☐

SALIENT FACTOR SCORE SHEET

INTERMEDIATE INCARCERATION

Case Name_____ Original Commitment Number_____

Item A..... ☐

Time at Most Skilled Position

Seven or more months = 1
Otherwise = 0

Item B..... ☐

Last Grade Completed

12th grade or more = 1
Otherwise = 0

Item C..... ☐

Known History of Drug Use

No prior history of heroin use = 1
Otherwise = 0

Item D..... ☐

Prior Juvenile Incarcerations

No prior juvenile incarcerations = 1
Otherwise = 0

Item E..... ☐

Prior State or Federal Incarcerations

Two or less incarcerations = 1
Otherwise = 0

Item F..... ☐

Age at First Arrest

20 Years or older	= 1
Otherwise	= 0

Item G..... ☐

Committing Institution

Non MCI-Concord Commitment	= 1
Otherwise	= 0

Item H..... ☐

Age at Pre-Release Admission

26 years of age or older	= 1
Otherwise	= 0

TOTAL SCORE..... ☐

APPENDIX III

FREQUENCY DISTRIBUTION OF SALIENT FACTOR SCORES: RECIDIVISM PREDICTION

FREQUENCY DISTRIBUTION OF SALIENT FACTOR SCORES FOR PRE-INCARCERATION VARIABLES 1975 CONSTRUCTION SAMPLE

SALIENT FACTOR SCORE	RECIDIVISM N	RECIDIVISM %	NON-RECIDIVISM N	NON-RECIDIVISM %	TOTAL N	TOTAL %
0	10	(6)	15	(2)	25	(3)
1	30	(19)	56	(9)	86	(11)
2	34	(21)	82	(13)	116	(14)
3	44	(28)	172	(27)	216	(27)
4	29	(18)	135	(21)	164	(20)
5	8	(5)	94	(15)	102	(13)
6	3	(2)	62	(10)	65	(8)
7	1	(1)	31	(5)	32	(4)
TOTAL	159	(100)	647	(100)	806	(100)

FREQUENCY DISTRIBUTION OF SALIENT FACTOR SCORES FOR INTERMEDIATE INCARCERATION VARIABLES 1975 CONSTRUCTION SAMPLE

SALIENT FACTOR SCORE	RECIDIVISM N	RECIDIVISM %	NON-RECIDIVISM N	NON-RECIDIVISM %	TOTAL N	TOTAL %
0	8	(5)	8	(1)	16	(2)
1	23	(15)	26	(4)	49	(6)
2	28	(18)	72	(11)	100	(12)
3	47	(30)	135	(21)	182	(23)
4	31	(20)	144	(22)	175	(22)
5	15	(9)	110	(17)	125	(16)
6	5	(3)	78	(12)	83	(10)
7	2	(1)	51	(8)	53	(7)
8	0	(0)	23	(4)	23	(3)
TOTAL	159	(100)	647	(100)	806	(100)

FREQUENCY DISTRIBUTION OF SALIENT FACTOR SCORES FOR POST INCARCERATION VARIABLES 1975 CONSTRUCTION SAMPLE

SALIENT FACTOR SCORE	RECIDIVISM N	RECIDIVISM %	NON-RECIDIVISM N	NON-RECIDIVISM %	TOTAL N	TOTAL %
0	5	(3)	8	(1)	13	(2)
1	14	(9)	16	(3)	30	(4)
2	30	(19)	44	(7)	74	(9)
3	38	(24)	96	(15)	134	(17)
4	31	(20)	117	(18)	148	(18)
5	18	(11)	105	(16)	123	(15)
6	14	(9)	97	(15)	111	(14)
7	7	(4)	55	(9)	62	(8)
8	1	(1)	48	(7)	49	(6)
9	1	(1)	40	(6)	41	(5)
10	0	(0)	21	(3)	21	(3)
TOTAL	159	(100)	647	(100)	806	(100)

FREQUENCY DISTRIBUTION OF SALIENT FACTOR SCORES FOR INTERMEDIATE INCARCERATION VARIABLES 1976 VALIDATION SAMPLE

SALIENT FACTOR SCORE	RECIDIVISM N	RECIDIVISM %	NON-RECIDIVISM N	NON-RECIDIVISM %	TOTAL N	TOTAL %
0	6	(4)	10	(1)	16	(2)
1	20	(13)	39	(5)	59	(6)
2	31	(21)	93	(12)	124	(13)
3	47	(31)	150	(19)	197	(21)
4	22	(15)	180	(23)	202	(22)
5	20	(13)	130	(17)	150	(16)
6	2	(1)	94	(12)	96	(10)
7	3	(2)	60	(8)	63	(7)
8	0	(0)	18	(2)	18	(2)
TOTAL	151	(100)	774	(100)	925	(100)

FREQUENCY DISTRIBUTION OF SALIENT FACTOR SCORES FOR PRE-INCARCERATION VARIABLES 1976 VALIDATION SAMPLE

SALIENT FACTOR SCORE	RECIDIVISM N	RECIDIVISM %	NON-RECIDIVISM N	NON-RECIDIVISM %	TOTAL N	TOTAL %
0	7	(5)	17	(2)	24	(3)
1	24	(16)	51	(7)	75	(8)
2	39	(26)	123	(16)	162	(18)
3	37	(25)	195	(25)	232	(25)
4	26	(17)	175	(23)	201	(22)
5	14	(9)	106	(14)	120	(13)
6	2	(1)	85	(11)	87	(9)
7	2	(1)	22	(3)	24	(3)
TOTAL	151	(100)	774	(100)	925	(100)

FREQUENCY DISTRIBUTION OF SALIENT FACTOR SCORES FOR POST INCARCERATION VARIABLES 1976 VALIDATION SAMPLE

SALIENT FACTOR SCORE	RECIDIVISM N	RECIDIVISM %	NON-RECIDIVISM N	NON-RECIDIVISM %	TOTAL N	TOTAL %
0	5	(3)	7	(1)	12	(1)
1	14	(9)	24	(3)	38	(4)
2	18	(12)	56	(7)	74	(8)
3	38	(25)	114	(15)	152	(16)
4	31	(21)	124	(16)	155	(17)
5	25	(17)	141	(18)	166	(18)
6	13	(9)	126	(16)	139	(15)
7	4	(3)	77	(10)	81	(9)
8	2	(1)	55	(7)	57	(6)
9	1	(1)	35	(5)	36	(4)
10	0	(0)	15	(2)	15	(2)
TOTAL	151	(100)	774	(100)	925	(100)

APPENDIX IV

FREQUENCY DISTRIBUTIONS OF SALIENT FACTOR SCORES: COMPLETION/NON-COMPLETION RISK

FREQUENCY DISTRIBUTION OF SALIENT FACTOR SCORES FOR PRE-INCARCERATION VARIABLES 1975 CONSTRUCTION SAMPLE

SALIENT FACTOR SCORE	SUCCESSFUL COMPLETION		NON-COMPLETION		TOTAL	
	N	%	N	%	N	%
0	3	(1)	8	(11)	11	(2)
1	10	(3)	22	(10)	32	(6)
2	44	(13)	34	(15)	78	(14)
3	64	(19)	70	(31)	134	(24)
4	80	(24)	39	(17)	119	(21)
5	77	(23)	30	(13)	107	(19)
6	45	(13)	20	(9)	65	(12)
7	18	(5)	1	(1)	19	(3)
TOTAL	341	(100)	224	(100)	565	(100)

FREQUENCY DISTRIBUTION OF SALIENT FACTOR SCORES FOR INTERMEDIATE INCARCERATION VARIABLES 1975 CONSTRUCTION SAMPLE

SALIENT FACTOR SCORE	SUCCESSFUL COMPLETION		NON-COMPLETION		TOTAL	
	N	%	N	%	N	%
0	2	(1)	6	(3)	8	(1)
1	8	(2)	17	(8)	25	(4)
2	35	(10)	29	(13)	64	(11)
3	44	(13)	59	(26)	103	(18)
4	72	(21)	49	(22)	121	(21)
5	66	(19)	23	(10)	89	(16)
6	59	(17)	25	(11)	84	(15)
7	40	(12)	16	(7)	56	(10)
8	15	(4)	0	(0)	15	(3)
TOTAL	341	(100)	224	(100)	565	(100)

FREQUENCY DISTRIBUTION OF SALIENT FACTOR SCORES FOR PRE-INCARCERATION VARIABLES 1975 VALIDATION SAMPLE

SALIENT FACTOR SCORE	SUCCESSFUL COMPLETION		NON-COMPLETION		TOTAL	
	N	%	N	%	N	%
0	3	(1)	4	(1)	7	(1)
1	17	(3)	23	(8)	40	(5)
2	53	(11)	41	(13)	94	(12)
3	148	(30)	104	(34)	252	(31)
4	128	(26)	80	(26)	208	(26)
5	95	(19)	43	(14)	138	(17)
6	44	(9)	7	(2)	51	(6)
7	14	(3)	3	(1)	17	(2)
TOTAL	502	(100)	305	(100)	807	(100)

FREQUENCY DISTRIBUTION OF SALIENT FACTOR SCORES FOR INTERMEDIATE INCARCERATION VARIABLES 1976 VALIDATION SAMPLE

SALIENT FACTOR SCORE	SUCCESSFUL COMPLETION		NON-COMPLETION		TOTAL	
	N	%	N	%	N	%
0	2	(1)	4	(1)	6	(1)
1	12	(2)	13	(4)	25	(3)
2	39	(8)	40	(13)	79	(10)
3	113	(23)	80	(26)	193	(24)
4	116	(23)	85	(28)	201	(25)
5	106	(21)	49	(16)	155	(19)
6	73	(15)	24	(8)	97	(12)
7	29	(6)	8	(3)	37	(5)
8	12	(2)	2	(1)	14	(2)
TOTAL	502	(100)	305	(100)	807	(100)

END