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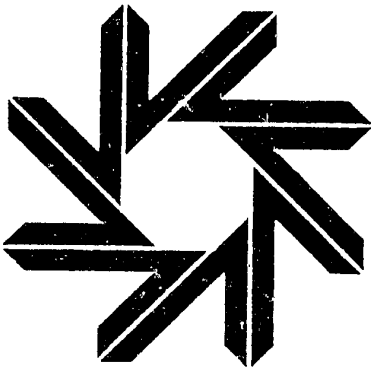
CRIMINAL JUSTICE PREDICTION SCALES

A Survey of the 50 States



DEPARTMENT OF CORRECTIONS
Research and Reporting Unit

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ACQUISITIONS

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ACKNOWLEDGEMENT

The cooperation of the state criminal justice agencies which supplied the research studies and prediction scales found in this report, is gratefully acknowledged. Preparation of the material in this report would not have been possible without the support of many criminal justice professionals across the country.

The present report was compiled by J. Allen Hinshaw, a Researcher in the Research and Reporting Unit of the Division of Program Development and Evaluation. Any inquiries or questions concerning the report should be directed to:

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CRIMINAL JUSTICE PREDICTION SCALES

The present collection of prediction scales is the result of a survey of the 50 states. The project was initiated both to acertain the level of the use of prediction in the criminal justice system in the United States and to gather a body of current data relevant to the subject. It is clear from the data acquired that prediction methodology is not at the base of the majority of the research or decision making in the criminal justice system. The survey produced fourteen prediction scales. Considering that virtually every criminal justice system utilizes a system of parole, has escape from custody, encounter inmates who are disruptive security risks, has a number of programs which are designated as treatment and therefore presumed to be habilitative, etc., it is somewhat suprising that so few have produced success and failure measures or base rate prediction scales by which program and system changes might be assessed.

In any case, the data from the survey are fourteen prediction scales, all of which were produced in criminal justice settings. The scales presented proport to quantify success and failure on parole, assault and property crime among parolees, the propensity for escape among inmates, the unresponsive and intractable inmate, factors associated with institutional commitment, and the community risk associated with probation placement. The number of cases on which the scales were developed range from less than 200 to several thousand.

The techniques to produce the scales vary in sophistication and complexity. Burgess and experience scales are included which depended almost exclusively on the experience of criminal justice professionals for either variable selection or assigned weight. Several base expectancy scales are included which were developed by simple assignment of percentage expectancies to groups formed by the combination of several a priori variables shown to discriminate the desired characteristic. The developers of at least one scale used configural analysis to asertain the best discriminator from among a larger pool of variables. Several of the researchers used multiple regression techniques or discriminate analysis to produce linear prediction equations explaining the greatest amount of variability in the criterion variable from a set of predictor variables. There are advantages and disadvantages to each of the methods - no prediction method or scale should be assumed to be superior or inferior to any other without testing its predictive validity on a target population.

The accuracy of a prediction device depends on the reliability and validity of the variables in the data base and the degree to which the construct sample is truly representative of the target population. Reliability and validity are statistical concepts involving the degree to which data elements are reproducible and

accurate. Concerning the construct sample representativeness, there is no substitute for large numbers of cases. Because of these or other issues, the literature containing the scales reproduced here often expressed the researchers' concern that the device should not be used outside the population on which it was produced. The same caution is expressed here - no scale appearing in this report should be used for any purpose without first checking its predictive validity on the intended population.

PAROLE PREDICTION SCALES

NCCD - Base Expectancy Scale
NCCD - Parole Success Prediction
CONNECTICUT - Parole Success Prediction
OHIO - Parole Success Prediction

MULTIPLE REGRESSION PREDICTION OF PAROLE SUCCESS

BASE EXPECTANCY SCALE (BES)

The Base Expectancy Scale was developed by the National Council on Crime and Deliquency to predict success on parole. Multiple regression techniques were used. Specific information concerning the development and predictive validity of the scale is not available at this writing. Further information has been requested.

The items in the scale are scored with the designated weight if the condition in the item is met. The items are scored zero (0) if the condition is not met. It is noted that the scale is static - there are no items which would change over time.

Four of the items on the scale are related to the inmate's criminal history (a, d, h and i), one to his families involvement in criminal activity (c), one to his history of substance abuse (b), and one variable is an assigned characteristic (e).

MULTIPLE REGRESSION PREDICTION
OF PAROLE SUCCESS
AFTER TWO YEARS

BASE EXPECTANCY SCALE (BES)

a.	If arrest-free five or more years	+16		
b.	If no history of any opiate use	+13		
c.	If no family criminal record	+ 8		
d.	If commitment offense not checks or burglary	+13		
e.	Multiply 'Age at Commitment' times 0.6	+		
f.	Add 21 to all cases	+21	21	
g.	Subtotal (a + b + c + d + e + f)			
h.	Multiply 'Number of Aliases' times 3	+		
i.	Multiply 'Number of prior Incarcerations' times 5	+		
j.	Subtotal (h + i)			-
k.	Base Expectancy Score (g minus j)			

BASE EXPECTANCY SCORE	PERCENTAGE OF GROUP WITH FAVORABLE PAROLE OUTCOMES AFTER TWO YEARS
92 -100	87%
73 - 91	76%
63 - 72	64%
44 - 62	53%
34 - 43	49%
15 - 33	29%
0 - 14	14%

NCCD-PAROLE SUCCESS PREDICTION MULTIPLE DISCRIMINANT ANALYSIS

The data for the present study were obtained from the National Council on Crime and Delinquency (NCCD). The construct sample contained 6,281 cases and the validity sample 6,393 cases. All parolees were released from adult penal institutions in 1969. Data from every state except Mississippi and Wisconsin were included. The information on all parolees included in the study met the following criteria:

1. Complete two-year follow-up data was available.

2. The most recent confinement was for an "index" crime (i.e., murder, forcible rape, aggravated assault, robbery, burglary, grand larceny, or auto theft).

3. The parolees were paroled from and followed up the same paroling agency.

The scale is scored by multiplying the coefficient appearing in the formula by the numeric designation appearing beside the variable condition and algebraically summing the results. The scale contains five items related to criminal history (A, D, E, F, and G), two concerned with substance abuse (H and I), and two assigned characteristics (B and C).

NCCD-PAROLE SUCCESS PREDICTION
MULTIPLE DISCRIMINANT ANALYSIS

$$Y = .01020 + .00213(A) + .00368(B) + .51897(C) - .65444(D) - .53192(E) - .35882(F) - .11469(G) - 1.09301(H) - .42197(I)$$

Where

Y = Prediction Score

+ Success Prediction

- Failure Prediction

and

A = Incarceration length in months

B = Age at release in months

C = Sex

(1) Female

(0) Male

D = Admission Type

(1) Probation or Parole violator

(0) New court commitment

E = Offense Type

(1) Property offense

(2) Person offense

F = Number of prior prison commitments

G = Number of prior non-prison sentences

H = Drug Use

(1) Known User

(0) Otherwise

I = Alcohol Use

(1) Known History of alcohol involvement

(0) Otherwise

CRITERION SAMPLE CLASSIFICATION

N = 6,281

Success = 3,445 54.8%
Failure = 2,836 45.1%

The prediction scores were divided into Decile Groups

(10 groups with an equal number in each group.)

DECILE GROUP	DISCRIMINANT SCORE CUTOFF	PERCENTAGE ACTUAL SUCCESS	PERCENTAGE ACTUAL FAILURE
1	1.22	83.8	16.2
2	.80	69.7	30.2
3	.49	63.2	36.8
4	.27	60.5	39.5
5	.03	55.3	44.7
6	- .21	51.8	48.2
7	- .49	49.7	50.3
8	- .82	45.7	54.3
9	-1.29	39.3	60.7
10	$-\infty$	30.4	69.6

VALIDITY SAMPLE CLASSIFICATION

N = 6,395

Success = 3,533 55.2%
Failure = 2,862 44.8%

DECILE GROUP	DISCRIMINANT SCORE CUTOFF	PERCENTAGE ACTUAL SUCCESS	PERCENTAGE ACTUAL FAILURE
1	1.25	88.0	12.0
2	.81	69.6	30.4
3	.48	64.2	35.8
4	.26	56.3	43.7
5	.02	55.0	45.0
6	- .23	50.7	49.3
7	- .49	48.9	51.1
8	- .82	46.6	53.4
9	-1.25	38.9	61.1
10	$-\infty$	34.1	65.9

CONNECTICUT-PAROLE SUCCESS AND FAILURE

The subjects in the study were 106 young, male adult offenders paroled between July 1971 and January 1972. The sample is relatively small and the resulting prediction equation subject to both geographic and statistical constraints. While having limited applicability, scales developed in specific regions or service areas can be useful in determining the allocation of limited resources or in designing treatment programs within the affected areas. The present study was based on 19 prediction variables. No validity study was conducted.

The scale is scored by multiplying the coefficient appearing in the formula by the numeric designation appearing beside the variable condition and algebraically summing the scores obtained. Just as with the preceeding scale, the predictor is static. There are two items related to criminal history (D and E), one concerning substance abuse (F), two related to social history (A and C) and one assigned characteristic (B).

CONNECTICUT-MULTIPLE DISCRIMINANT PREDICTION OF PAROLE SUCCESS-FAILURE

$$Y = 6.764 - .2882(A) - .6268(B) + .1888(C) - .2744(D) - .7720(E) + 1.4800(F)$$

where

Y = Prediction Score
+ Success prediction
- Failure prediction

and

A = Area of Residence
(1) Hartford
(2) Bridgeport
(3) New Haven
(4) Parole Service Area

B = Race - Ethnicity
(1) White
(3) Black
(5) Puerto Rican
(9) Indian, Oriental, other

C = Religious Group Membership
(0) None/No Entry
(1) Atheist
(3) Black Muslim
(5) Jewish
(7) Roman Catholic
(9) Other Christian/Orthodox

D = Prior Institutionalization
(0) None
(1) Connecticut School for Boys
(3) Cheshire
(5) Somers
(9) More than one institution

E = Number of Prior Prison Sentences

F = Number of Drug-Related Charges/Counts on this confinement.

OHIO - PAROLE SUCCESS PREDICTION

Multiple regression techniques were used in Ohio to predict success on parole. The effort yielded an equation which was a low level predictor. Further investigation revealed that the equation predicted no better than a Burgess Scored schema consisting of three variables. (Burgess Scoring implies equal weight given to each variable.) It is noted that neither the equation nor the Burgess system discriminated very well.

The scale contains two criminal history variables (1 and 3) and one related to substance abuse (2). The scale is static.

OHIO - PAROLE SUCCESS PREDICTION
BURGESS SCORING

Score one (1) point if the stated condition is met and zero (0) if it is not.

1. Committing Offense - Property Crime ☐

2. History of Drug or Alcohol abuse ☐

3. Prior Sentence or Incarceration ☐

TOTAL BURGESS SCORE ☐

BURGESS SCORE	RATE OF SUCCESS ON PAROLE (1 year)	PERCENT OF POPULATION
0	98.8%	3%
1	85.8%	17%
2	79.6%	44%
3	69.8%	36%

ASSAULT AND VIOLENCE SCALES

MICHIGAN - Assault Risk Prediction
TEXAS - Violence Prediction Scale

MICHIGAN ASSAULT RISK SCREENING

The Michigan Department of Corrections developed an Assault Risk Screening device on a sample of 2,200 inmates released to parole in 1971. Configural analysis was used to select the combination of variables which predicted the highest and lowest rates of violent crime. The predictive validity of the scale is currently being evaluated on a sample of 1974 parole releases.

The scale evaluates four criminal history variables, one social variable (marriage), and one institutional variable (misconduct). The scale is static.

MICHIGAN DEPARTMENT OF CORRECTIONS

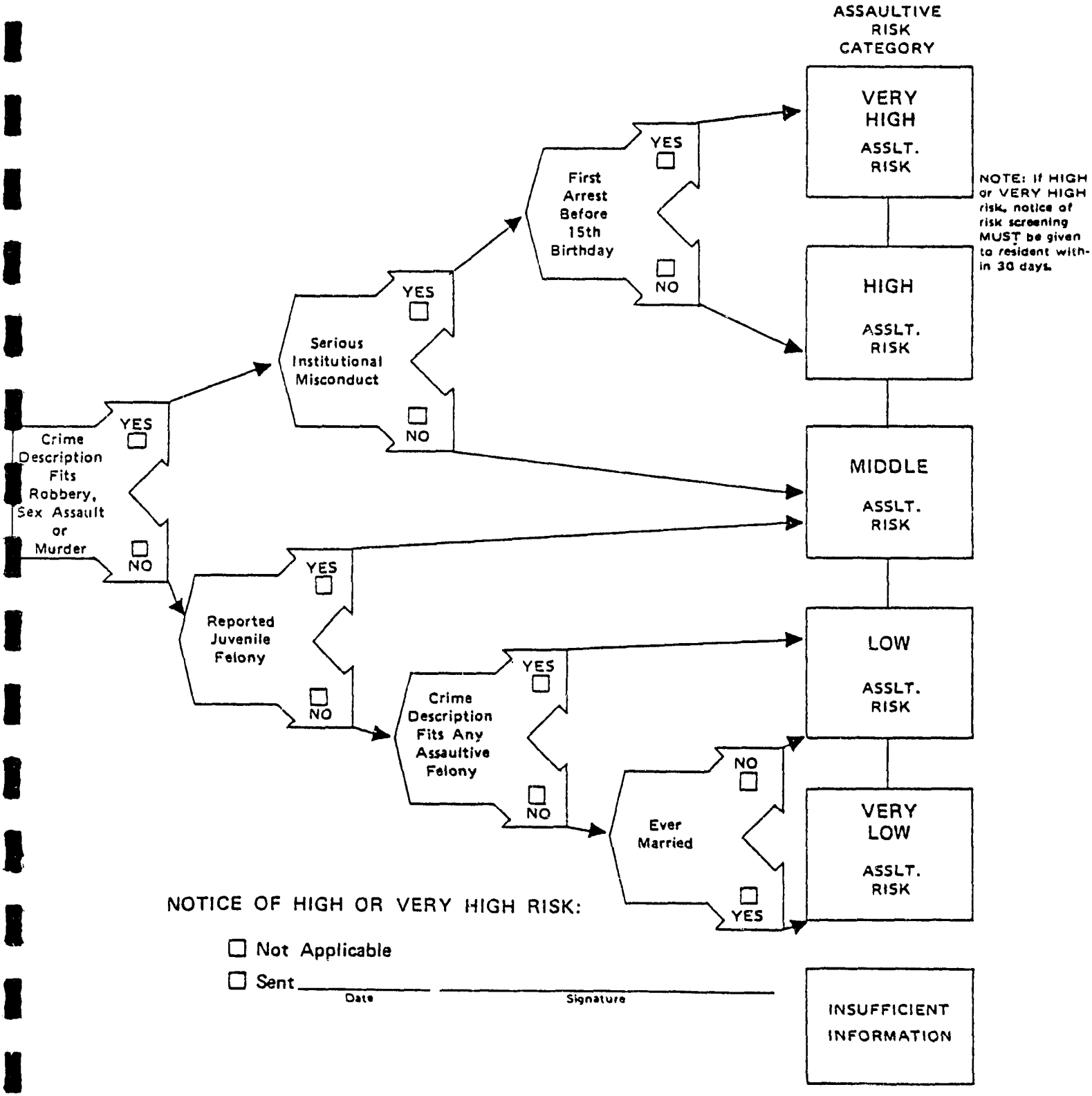
ASSAULTIVE RISK SCREENING SHEET

CSO-353 12/77

RESIDENT'S NAME	NUMBER

SCREENED BY	LOCATION	DATE

INSTRUCTIONS: Starting at left, check ☑ "yes" or "no" at each item. This directs you to next item. When a risk category is reached at right, circle that category. If information is missing or conflicting, circle insufficient information box and refer to classification director. See definitions on reverse side.



NOTICE OF HIGH OR VERY HIGH RISK:

☐ Not Applicable

☐ Sent _____ _____
Date Signature

DEFINITIONS OF ASSAULTIVE RISK CLASSIFICATION FACTORS

1. Serving on robbery, sexual assault, or homicide. This factor will be coded "yes" if the individual is now serving on and/or has not been discharged from sentence for a felony, the description of which indicates that; by any participant in the crime, there was either: a) the taking or attempt to take property or money by force or threat of force during personal confrontation, b) sexual assault or attempted sexual assault by force or threat of force, or c) death of a victim.

This determination is based on the best judgment of the person doing the coding after review of the investigator's description of the offense, and all other relevant information concerning the offense available. Because the offense of conviction is a result of plea bargaining and other factors not related to behavior during the incident, the coding in the study and, therefore, in its application is based on actual behavior so far as this can be determined from documentation normally available.

2. Serious misconduct or security segregation. This variable will be coded "yes" if, during any sentence for which he is still serving, the resident has been a) found guilty of major misconduct which is nonbondable under current department-wide policy by the disciplinary hearing committee; that is, found guilty of homicide, assault, intimidating or threatening behavior, sexual assault, fighting[1] inciting to riot or strike, rioting or striking, or possession of dangerous contraband, or escape, and attempt to escape; OR b) was placed in administrative segregation by the security classification committee. Involuntary segregation for the resident's own protection is not to be counted in this category; neither is segregation within R&GC only.

3. First arrest before 15 years. This variable is to be coded "yes" if the presentence report or policy arrest record indicates that the individual was arrested for or had a petition filed for any criminal behavior prior to his 15th birthday.

4. Reported juvenile felony. This variable is to be coded "yes" if the record indicates that the individual, before his 17th birthday, has a reported arrest or petition filed for behavior which would constitute a felony for an adult.[2]

5. Serving on assaultive felony. The individual shall be coded "yes" on this variable if the description of his behavior during the course of any felony on which he is now serving indicated that it involved harm or threat of harm to any person. This is defined as behavior constituted by any of the felonies listed below.

6. Ever married. This variable is to be coded "yes" if the individual, at the time of the commission of the instant offense, was or had ever been legally married. A commonlaw relationship of at least seven years duration shall be counted as equivalent to legal marriage if it can be documented to the satisfaction of the coder.

[1] If the hearing report clearly indicates that the individual was only reacting to attack and had no part in provoking the incident it should not be counted here.

[2] Incarceration or probation for criminal behavior will be taken as evidence of perition or arrest. Status offenses are not to be counted.

OFFENSES TO BE REGARDED AS ASSAULTIVE FOR PURPOSES OF RISK CLASSIFICATION

M.C.L.	750.316	Murder, First
	750.317	Murder, Second Degree
	750.91	Attempt to Murder
	750.321	Manslaughter
	750.324	Negligent Homicide
	750.83	Assit W/Intent to Commit Murder
	750.349	Kidnapping
	750.82	Felonious Assault
	750.84	Assit W/Int Gr Bod Harm Less Murder
	750.89	Assit W/Int to Rob & Steal Armed
	750.87	Assit W/Int to Commit Felony
	750.479A	Driver Assault Police
	750.88	Assit W/Int to Rob & Steal Unarmed
	750.136	Cruelty to Children
	750.529	Robbery Armed
	750.530	Robbery Unarmed
	750.205	Place Explosive By Prop W/Int Disch
	750.209	Place Off. Subst. W/Int to Injure
	750.210	Possession of Bomb
	750.211A	Explosive Devices, Use or Possess

M.C.L.	752.861	Careless Use of Firearms to Kill
	750.479	Resisting, Obstructing Officer
	752.542	Incite, Take Part in Riot
	750.197C	Jail Break - Armed
	752.191	Felonious Driving
	750.85	Assit W/Int to Rape
	750.158	Sodomy
	750.333	Incest
	750.336	Indecent Liberties
	750.338/338A/338B	Gross Indecency
	750.339/340	Debauchery
	750.341/342	Carnal Knowledge
	750.520	Rape (Incl. Statutory)
	750.520b	Criminal Sexual Conduct, First Degree
	750.520c	Criminal Sexual Conduct, Second Degree
	750.520d	Criminal Sexual Conduct, Third Degree
	750.520g	Assit W/Int to Com Crim Sex Conduct
	767.61A	Offense by Sexually Delinquent
	750.71-80	Arson*

*Except where the arson can clearly be established to have taken place only for purposes of profit and without risk to life or safety.

CRITERION SAMPLE CLASSIFICATION

Risk Group	Recidivism Rate*	% of Sample
Very High Risk	40.0%	4.7%
High Risk	20.7%	6.6%
Middle Risk	11.8%	45.5%
Low Risk	6.3%	23.5%
Very Low Risk	2%	19.7%

*Base Rate - 10.5%

TEXAS - VIOLENCE PREDICTION SCALE

The Texas Department of Correction developed a Violence Preduction Scale using multiple regression techniques. The formula was based upon 150 cases who had recidivated with a violent offense as opposed to 150 first offenders who had not recidivated regardless of the crime first committed. The validity of the prediction scores was checked on the construct sample. No predictive validity study was conducted.

The scale is static and contains seven items related to the inmate's personal criminal history (2,3,5,6,7,8, and 10), one concerning family criminal history (4), one on substance abuse (9), and one concerning education and skills (1).

VIOLENCE PREDICTION SCALE

NAME _____ NUMBER _____

INSTRUCTIONS: Check appropriate score in each category then place score in right hand column. Total scores in right hand column.

				Score
1.	Highest Grade Obtained in Years of Schooling	Years	0 | 1-3 | 4-6 | 7-9 | 10-12 | > 12	1
		Score	8.7 | 8.2 | 5.9 | 4.4 | 2.9 | 0	
2.	Number of Felony Probations	Number	0 | 1 | 2 | 3 | > 3	2
		Score	53.5 | 23.3 | 3.5 | 1.6 | 0	
3.	Number of Felony Convictions	Number	1 | 2 | 3 | 4 | > 4	3
		Score	15.6 | 8.7 | 5.3 | 2.7 | 0	
4.	Number of Times Siblings Have Done Prison Time	Number	0 | 1 | 2 | > 2	4
		Score	0 | 4.3 | 8.3 | 11.3	
5.	Number of State Paroles	Number	0 | 1 | > 1	5
		Score	0 | 26.5 | 26.7	
6.	Number of Detainers	Number	0 | 1 | > 1	6
		Score	0 | 20.2 | 22.7	
7.	Charge of First Juvenile Arrest	Charge	Assault | All Other	7
		Score	18.3 | 0	
8.	Number of Times Subject Admits To Shoplifting	Number	0 | 1-50 | > 50	8
		Score	0 | 20.1 | 46.0	
9.	How Often Have You Used Marijuana	Level	Never | < 5 times | Monthly | Weekly | Daily	9
		Score	15.5 | 12.7 | 10.5 | 9.6 | 0	
10.	Most Serious Present Offense	Offense	Murder | Drugs | Burg. | Aslt. | Others	10
		Score	-5.8 | -17.8 | 4.9 | 21.8 | 0	

VIOLENCE CLASSIFICATION								
Total Score	25	50	75	100	125	150	175 & up	TOTAL SCORE
Violence Class	Low		Med.			High		

VIOLENCE SCALE VALIDATION RESULTS

Actual Score	Violent			Non-Violent		
	Number	Percent	Cum. Percent	Number	Percent	Cum. Percent
0- 10	0	0.0%	0.0%	1	0.8%	0.8%
11- 20	0	0.0%	0.0%	2	1.6%	2.4%
21- 30	0	0.0%	0.0%	4	3.2%	5.6%
31- 40	0	0.0%	0.0%	7	5.6%	11.2%
41- 50	1	0.9%	0.9%	16	12.9%	24.1%
51- 60	4	3.4%	4.3%	15	12.1%	36.2%
61- 70	6	5.1%	9.4%	16	12.9%	49.1%
71- 80	9	7.7%	17.1%	18	14.5%	63.6%
81- 90	13	11.1%	28.2%	13	10.5%	74.1%
91-100	17	14.5%	42.7%	15	12.1%	86.2%
101-110	21	17.9%	60.7%	5	4.0%	90.2%
111-120	18	15.4%	76.1%	6	4.8%	95.0%
121-130	13	11.1%	87.2%	3	2.5%	97.5%
131-140	9	7.7%	94.9%	3	2.5%	100.0%
141-150	5	4.3%	99.1%	0	0.0%	--
151-160	0	0.0%	99.1%	0	0.0%	--
161-170	0	0.0%	99.1%	0	0.0%	--
171-180	0	0.0%	99.1%	0	0.0%	--
181-190	1	0.9%	100.0%	0	0.0%	--
191-200	0	0.0%	--	0	0.0%	--
TOTALS	117	100.0%	100.0%	124	100.0%	100.0%

PROPERTY CRIME PREDICTION

MICHIGAN - Property Crime Prediction

MICHIGAN - PROPERTY CRIME SCREENING

The Michigan Department of Corrections developed a property crime screening device on a sample of 1820 inmates released to parole in 1971. Configural analysis was used to select the combination of variables which predicted the highest and lowest rates of property crime. The predictive validity of the scale is currently being evaluated on a sample of 1974 parole releases.

The scale is static and contains two criminal history variables, one connected with substance abuse (drugs), and one institutional variable (misconduct).

MICHIGAN DEPARTMENT OF CORRECTIONS

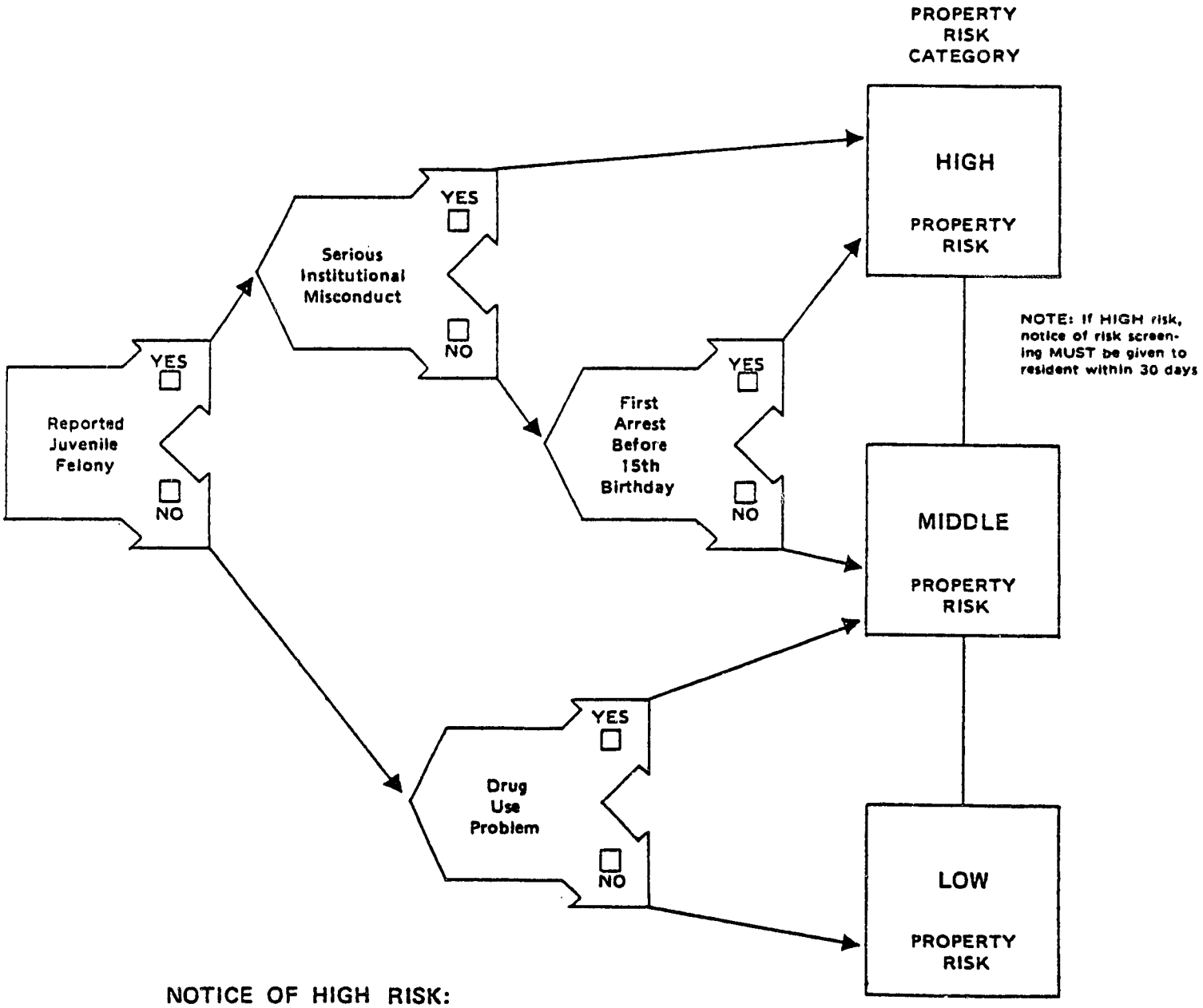
PROPERTY RISK SCREENING SHEET

CSO-352 12/77

RESIDENT'S NAME	NUMBER

SCREENED BY	LOCATION	DATE

INSTRUCTIONS: Starting at left, check ☑ "yes" or "no" at each item. This directs you to next item. When a risk category is reached at right, circle that category. If information is missing or conflicting, circle insufficient information box and refer to classification director. See definitions on reverse side.



NOTICE OF HIGH RISK:

☐ Not Applicable

☐ Sent_____ _____

Date Signature

DEFINITIONS OF PROPERTY RISK CLASSIFICATION FACTORS

1. Reported juvenile felony. This variable is to be coded "yes" if the record indicates that the individual, before his 17th birthday, has a reported arrest or petition filed for behavior which would constitute a felony for an adult.[2]

2. Serious misconduct or security segregation. This variable will be coded "yes" if, during any sentence for which he is still serving, the resident has been a) found guilty of major misconduct which is nonbondable under current department-wide policy by the disciplinary hearing committee; that is, found guilty of homicide, assault, intimidating or threatening behavior, sexual assault, fighting,[1] inciting to riot or strike, rioting or striking, or possession of dangerous contraband, or escape, and attempt to escape; OR b) was placed in administrative segregation by the security classification committee. Involuntary segregation for the resident's own protection is not to be counted in this category; neither is segregation within R&CG only.

3. First arrest before 15 years. This variable is to be coded "yes" if the presentence report or police arrest record indicates that the individual was arrested for or had a petition filed for any criminal behavior prior to his 15th birthday.

4. Drug use problem. This variable shall be coded "yes" if and only if the individual, at or about the time of any offense on which he is now serving, was: a) addicted to any nonprescribed controlled substance other than marijuana or alcohol, or b) in chronic or sustained use of any nonprescribed controlled substance other than marijuana or alcohol. Occasional use is not to count, nor is addiction or sustained use which apparently terminated at least six months before the instant offense. It is recognized that this variable will be difficult to code, and information will often be lacking. The coder's best judgment, based on material present in the written record, must be the basis.

[1] If the hearing report clearly indicates that the individual was only reacting to attack and had no part in provoking the incident it should not be counted here.

[2] Incarceration or probation for criminal behavior will be taken as evidence of petition or arrest. Status offenses are not to be counted.

CRITERION SAMPLE CLASSIFICATION

Risk Group	Recidivism Rate*	% of Sample
High Risk	39.5%	23.6%
Middle Risk	27.0%	33.0%
Low Risk	15.1%	43.4%

*Base Rate - 28.0% after excluding violent felonies. The base rate for the entire sample was 22.5%.

ESCAPE PREDICTION SCALES

NORTH CAROLINA - Escape Prediction Scale
CALIFORNIA - Escape Prediction Charts
ILLINOIS - Juvenile Absconsion Risk

NORTH CAROLINA - ESCAPE PREDICTION

James H. Panton in North Carolina developed what he called a Base Expectancy Escape Scale (BE-ES). The scale was developed on 3,611 male inmates admitted to the North Carolina Department of Correction in 1973. Weighted scores were assigned to each of the seven variables found to distinguish between escapees and non-escapees based on the percentage of inmates within each variable category who had escaped. (It is noted that the study utilized percentage expectancies rather than multiple regression or Discriminant analysis.) After development of the scale, a predictive validity study was conducted on 2,000 inmates admitted during 1974 and 1975, 1,000 of whom had escape records.

The scale contains two criminal history variables (4 and 8), two variables related to education and skills (3 and 7), two concerning social dimensions (5 and 6), and two which represent assigned characteristics (1 and 2).

(It is noted that Texas has produced a escape prediction equation based on multiple regression methods but did not publish the scale for security reasons).

NORTH CAROLINA
BASE EXPECTANCY ESCAPE SCALE

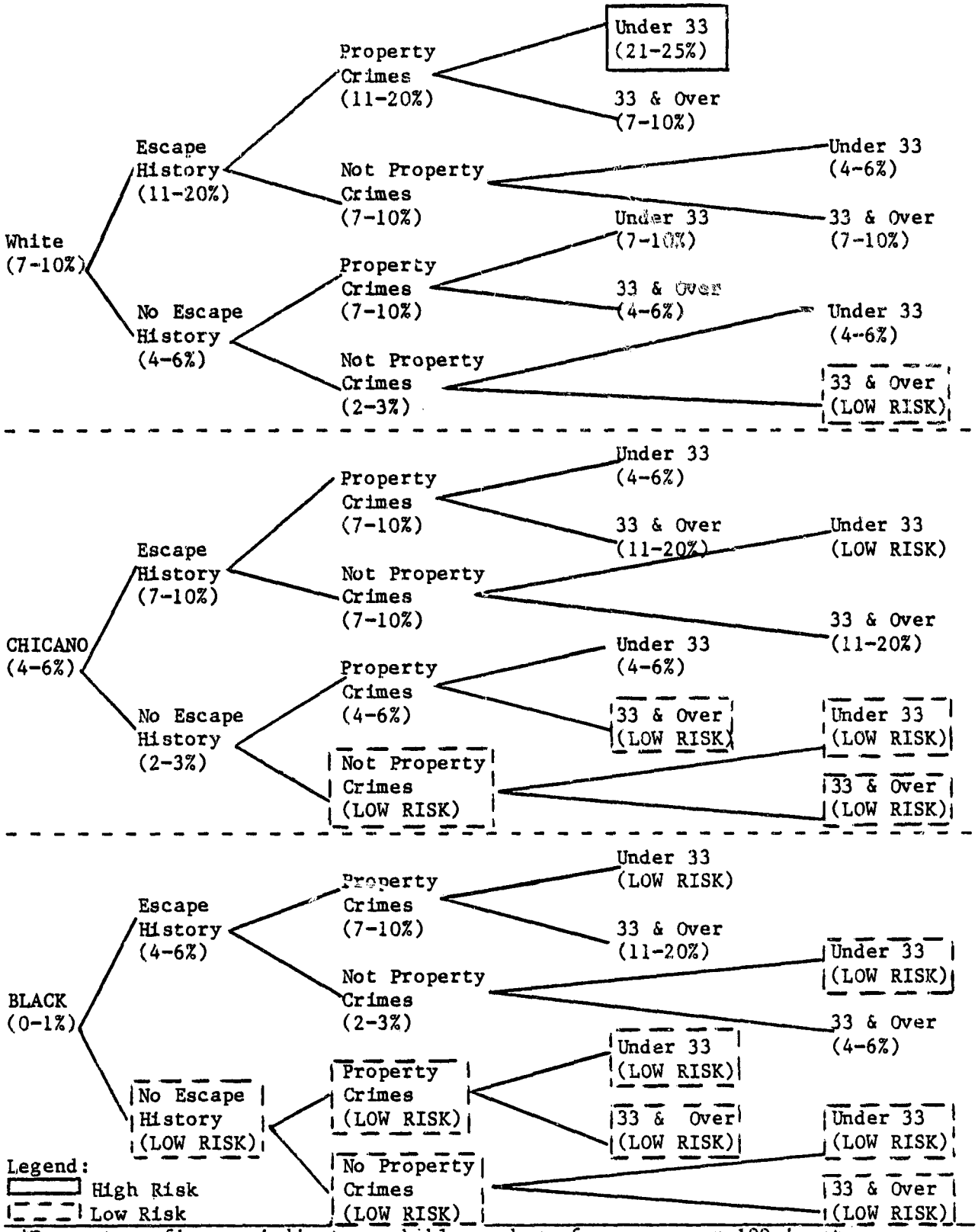
1. Race		☐☐
	White Male	22
	Other Male	11
2. Age Group		☐☐
	16-20	11
	21-30	23
	31-40	20
	41 and over	10
3. Intelligence Score		☐☐
	110 and over	26
	90-109	19
	80-89	14
	79 and above	10
4. Juvenile Training School Record		☐☐
	Prior Training School	33
	No Prior Record	14
5. Residence - Formative years		☐☐
	Urban	21
	Rural	13
6. Religious Participation		☐☐
	No participation	26
	Participated	14
7. Work Record		☐☐
	Unstable Work Record	22
	Stable Work Record	14
8. Escape Record		☐☐
	First Offender	16
	No Escape on Record	10
	One Escape on Record	28
	Two or More Escapes on Record	51
	TOTAL SCORE	☐☐☐

BE-ES SCORE RANGE	ESCAPEES FREQUENCY	NON-ESCAPEES FREQUENCIES	PERCENTAGE ESCAPING
185-225	295	0	100%
165-184	377	21	95%
155-164	171	89	66%
150-154	55	81	40%
130-149	102	508	16%
95-129	0	301	0%

CALIFORNIA ESCAPE RISK CHARTS

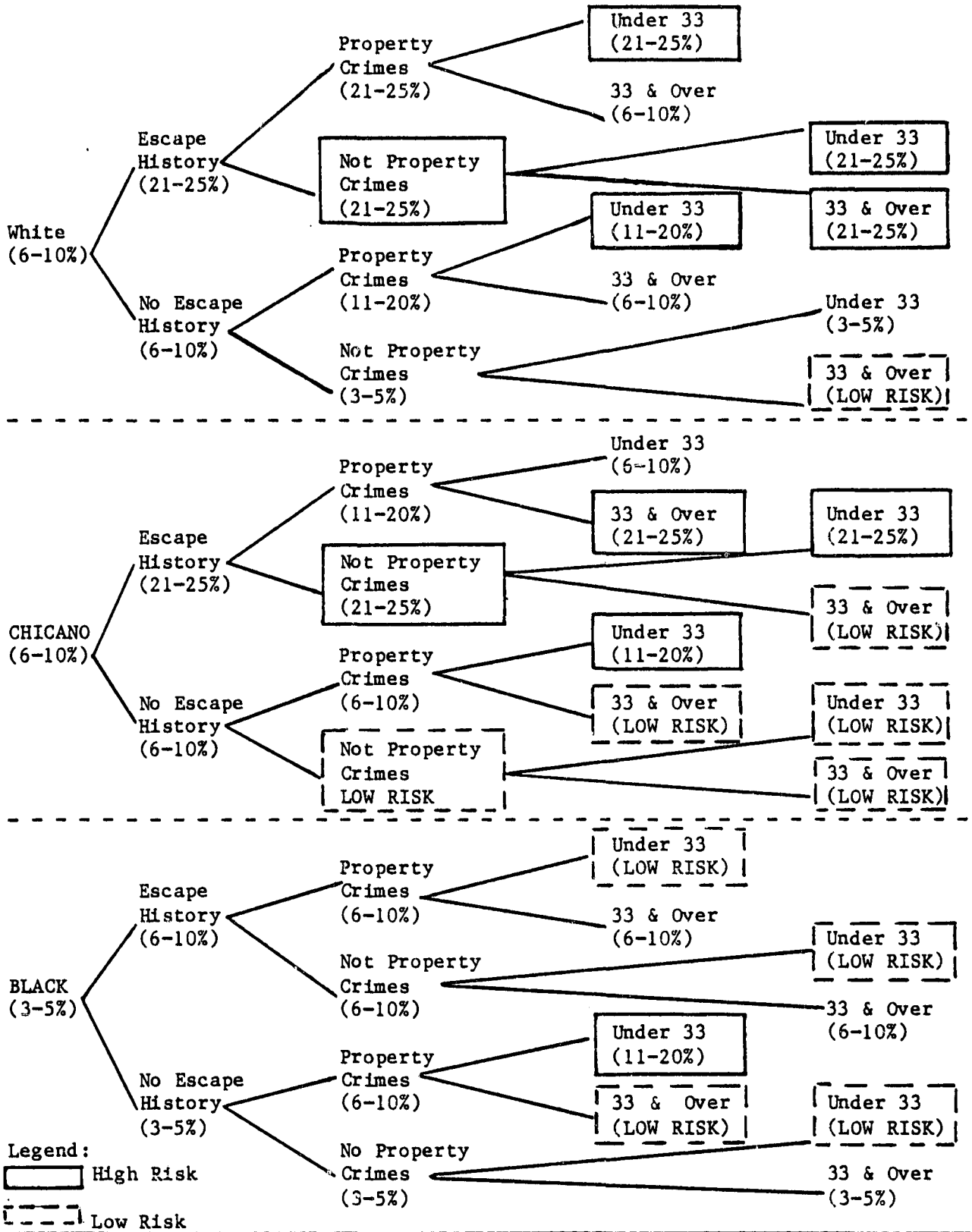
The present escape risk charts were developed from a sample of 1,494 cases. Separate charts were produced for all institutions combined, and for medium and minimum security units. The percentages indicated in the boxes on the tables are the base rates of escape for the group having the characteristics listed in the table. It is noted that the California charts consider a very limited number of variables. Overall the escape risk charts consider two criminal history variables, one institutional variable (security level), and one assigned characteristic (ethnic membership).

California Escape Risk Chart
All Institutions



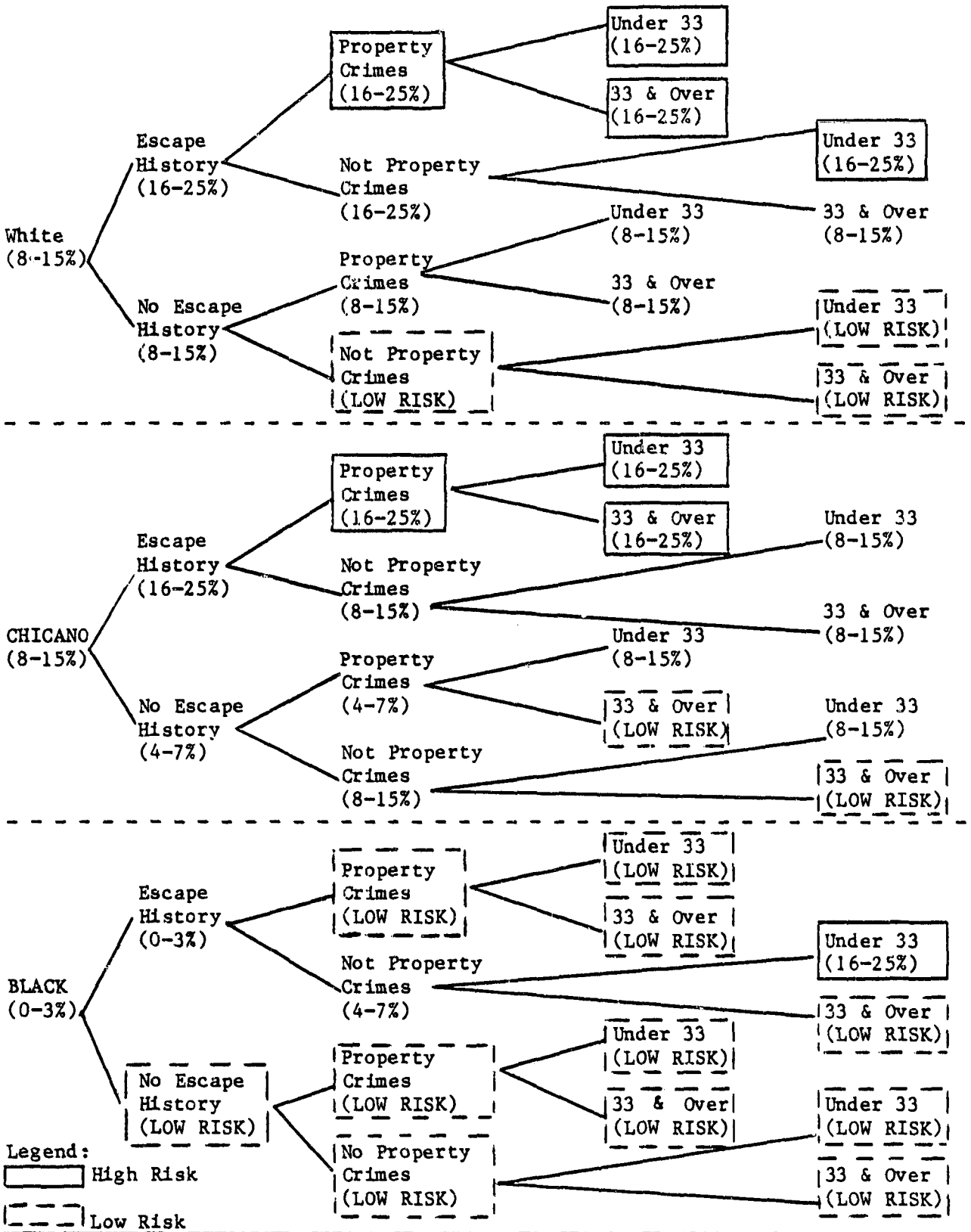
*Percentage figures indicate probable number of escapes per 100 inmates. Average rate is 5. Low Risk (0-1%); Low-Medium Risk (2-3%); High-Medium Risk (4-6%); High Risk (7%+). High Risk group is divided in the chart into three sub-groups, 7-10%, 11-20%, 21-25%. In this chart, the Low and Low-Medium Risk cases are combined in one category and labeled "LOW RISK" in the boxes.

California Escape Risk Chart
Medium Security Institutions



*Percentage figures indicate probable number of escapes per 100 inmates. Average rate is 10. Low Risk (0-2%); Low-Medium Risk (3-5%); High-Medium Risk (6-10%); High Risk (11%+). High Risk group is divided in the chart into two sub-groups 11-20% and 21-25%.

California Escape Risk Chart
Minimum Security Institutions



*Percentage figures indicate probable number of escapes per 100 inmates. Average rate is 10. Low Risk (0-3%); Low-Medium Risk (4-7%); High-Medium Risk (8-15%); High Risk (16%+).

ILLINOIS JUVENILE ABSCONSION

A scale was developed in Illinois to predict youth absconsions based on 618 absconsion reports gathered in 1974. The sample represented 45% of the total runaways for that year. The study is not entirely clear concerning the method utilized to establish variable weights. The weights appear to be based on an unspecified combination of variable comparisons within the absconsion group and comparisons between the absconsion group and the general population. Prediction tables were developed for White and for Black youths.

The scales consider two criminal history variables, two assigned characteristics, and one social history variable. A predictive validity study was conducted.

ABSCONSION PREDICTION TABLE
WHITE YOUTHS

RACE		[2]
White Youths	2	
AGE		[ ]
16 and over	5	
15-16	3	
under 15	2	
PARENTS MARITAL STATUS		[ ]
Married & Together	2	
Separated or Divorced	1	
Other	0	
PRESENT OFFENSE		[ ]
Auto Theft	3	
Burglary	2	
Other	0	
ABSCONSION HISTORY		[ ]
No Prior Absconsions	0	
One Prior Absconsion	1	
Two or More Prior	2	
TOTAL SCORE		[ ][ ]

ABSCONSION PREDICTION TABLE
BLACK YOUTHS

RACE		[1]
Black Youths	1	
AGE		[ ]
16 and over	4	
15 and 16	2	
under 15	1	
PARENTS MARITAL STATUS		[ ]
Married & Together	3	
Separated or Divorced	1	
Other	0	
PRESENT OFFENSE		[ ]
Burglary	2	
Auto Theft	1	
Other	0	
ABSCONSION HISTORY		[ ]
No Prior Absconsions	0	
One Prior Absconsion	1	
Two or More Prior	2	
TOTAL SCORE		[ ][ ]

PREDICTIVE VALIDITY - BOTH GROUPS

A predictive validity study involving 199 youths assigned to Youth Centers yielded the following results:

ABSCONSION RISK SCORE	ABSCONDER FREQUENCY	NON-ABSCONDER FREQUENCY	PERCENTAGE ABSCONDING
4 or less	2	35	5.4%
5 to 7	16	76	17.4%
8	14	13	14.0%
9	12	5	70.6%
10	20	6	76.9%

DISCIPLINE AND COMMITMENT SCALES

OHIO - The Intractable Inmate
IOWA - Admission Seriousness Scale

OHIO - THE INTRACTABLE INMATE

One research effort from Ohio attempted to distinguish those inmates who present a chronic disciplinary problem within the corrections system.

A stepwise multiple regression analysis on 22 classification variables resulted in the selection of six variables. The scale is scored by multiplying the variable weight from the formula times the value of the variable and algebraically summing the results.

Three of the variables are related to criminal history (1, 4, and 6), one to substance abuse (5), one to personality (2), and one to education and skills (3).

OHIO - MULTIPLE REGRESSION PREDICTION

THE INTRACTABLE INMATE

The intractable inmate is defined as an inmate who presents a chronic disciplinary problem within the correctional system. Stepwise multiple regression analysis of 22 classification variables resulted in the selection of the following 6 variables:

1. Percent Adult Life Incarcerated
   (18 years and over; high scores - intractable)

2. MMPI Depression Scale Score
   (high scores - intractable)

3. Minnesota Paper Form Board Score
   (low scores - intractable)

4. Use of Alias
   (use associated with intractable)

5. Extent of Alcohol Use
   (low use associated with intractable)

6. Number of Police Contacts as a Juvenile
   (high scores - intractable)

An individual inmates score (Y^1) can be computed as:

$$Y^1 = .04 + .01(X_1) + .02(X_2) - .01(X_3) + .15\ (X_4) - .10(X_5) + .03(X_6)$$

where

X_1 = percent of adult life incarcerated

X_2 = MMPI D Scale Score

X_3 = Minnesota Paper Form Board score

X_4 = 1, if alias used; 0, if none used

X_5 = 1, if extensive Alcohol use; 0, if not extensive

X_6 = number of police contacts as a juvenile

IOWA - FACTORS ASSOCIATED WITH INSTITUTIONAL COMMITMENT

ADMISSION SERIOUSNESS SCALE

Along with other scales, researchers in Iowa developed a scale which distinguished between persons convicted and committed to the state correctional system and those who were convicted but not committed. The researchers used the resulting variables to construct an Admission Seriousness Scale which they related to classification assignments within the institutions. No concurrent validity study was conducted for the scale.

The Admission Seriousness Scale contains four criminal history variables (1, 2, 3, and 5) and one variable involving substance abuse (4).

IOWA - FACTORS ASSOCIATED WITH INSTITUTIONAL COMMITMENT

Research indicated there were four principal variables which would predict commitment as opposed to release after conviction. The four variables were:

1. OFFENSE TYPE - committed offenders were more often convicted of offenses against persons rather than property (violent offenses)

2. SUBSTANCE ABUSE - committed offenders were more often involved with hard narcotics or with two of the following three non-narcotic drug categories:
   a. alcohol
   b. marijuna, hashish, T.H.C.
   c. other drugs

3. CRIMINAL HISTORY - committed offenders had prior juvenile or adult commitments more often than those not committed

4. MULTIPLE CHARGES - committed offenders were more often convicted on more than one charge

The four variables were used to construct a Commitment Seriousness Scale by which groups of offenders could be compared.

COMMITMENT SERIOUSNESS SCALE
BURGESS SCORING

Score one point for each variable present and zero if it is not present.

a. PERSON OFFENSE _____

b. PRIOR ADULT COMMITMENTS _____

c. PRIOR JUVENILE COMMITMENTS _____

d. SUBSTANCE ABUSE _____

e. MULTIPLE CHARGES _____

TOTAL SCORE _____

PROBATION RISK PREDICTION

IOWA - Community Risk Scale
TEXAS - Probation Score Sheet

IOWA - COMMUNITY RISK SCALE FOR MALE PROBATIONERS

Based on 1,725 cases the scale assesses the risk associated with placing a person on probation who has the characteristics designated in the scale. A predictive validity study is currently being conducted. The researchers in Iowa have used the present scale, and others, to demonstrate that:

1. "community risk" has not been a major consideration in Iowa sentencing.
2. "prisonization" does not occur as a result of incarceration in the state prison system.
3. parole supervision has benefits over direct release.
4. work release and vocational training have short-term benefits.
5. current community services fail to improve the chances of success for probationers.
6. community residential treatment protects the public but does not reduce recidivism.

It is noted that the conclusions drawn are tentative and depend on further confirming research. The Community Risk Scale contains three criminal history variables, two variables associated with education and skills, one concerning substance abuse, one social variable, and one assigned characteristic.

IOWA - COMMUNITY RISK SCALE

MALE FELON PROBATIONERS

Juvenile Record

Juvenile Commitments	+17
Juvenile Arrest but no commitments	+9
No Juvenile Arrests	0

Present Offense (Felony only)

High Recidivism Correlation +31

Robbery w/Aggravation, Breaking and Entering, Larceny of MV, Operating a MV without owners consent, False Checks and Uttering Forged Instruments.

High-Medium Recidivism Correlation +23

Robbery w/o Aggravation, Burglary, Escape, and Forgery.

Medium Recidivism Correlation +16

Carrying concealed weapons, Larceny over $20, and Larceny in daytime or nighttime over $20

Low-Medium Recidivism Correlation 8

Assault w/intent to inflict great bodily injury, Conspiracy, Lascivious Acts with Children, Receiving and Concealing stolen goods, Rape or Assault to Rape, Going Armed w/intent, and Malicious Injury to Buildings.

Low or Unknown Recidivism Correlation 0

All other felony offenses, including those with low recidivism correlation such as Operating a Motor Vehicle Under the Influence-Subsequent Offense, Drug Crimes, Manslaughter, Assault to Murder or to Commit a Felony, and various non-rape sex offenses.

Prior Adult Record

Adult jail or prison Terms	+12
Adult Convictions only	+6
No Adult Convictions	0

Age at Conviction

Under 20	+22
20 to 24	+15
25 to 29	+7
30 or over	0

Drug or Alcohol Involvements

Hard Narcotic or Cocaine	+9
Excessive Alcohol or Non-Narcotic Drug	+5
No History of Excessive Drug/Alcohol	0

Family Situation at Conviction

Not Both Married and Living w/Spouse	3
Married and Living w/Spouse	0

Employment Status at Conviction

Not Full-Time employed at a Skilled Occupation	4
Employed Full time at a Skilled Occupation	0

Formal Education

Less than 10 years	3
10 years or more	0

TOTAL

SCORE RANGE	EVALUATION	FAILURE RATE	%Cases In Level
0 to 23	Low Risk	7.0%	16%
24 to 57	Low-Medium Risk	23.5%	53%
58 to 65	High-Medium Risk	38.1%	14%
66 to 100	High Risk	62.2%	17%

PROBATION EVALUATION SCORE SHEET
DALLAS PROBATION DEPARTMENT

Although the following scale has not been evaluated, it represents one of the better efforts to quantify probation placement. Input on the scale is divided into five areas: prior criminal history; narcotics, drugs and alcohol; emotional and physical status; employment and education; and family ties. The individual items are weighted on a scale from 1 to 5 based on the experience of the members of the Dallas Adult Probation Department. Preliminary research on the instruments predictive ability is being conducted by the East Texas State University.

PROBATION EVALUATION-DALLAS PROBATION DEPARTMENT

Complete this form prior to the Probation Date so that it accompanies the Probation Papers which are presented to the Judge. If a person does not qualify on a particular item, a zero should be entered opposite that item.

A.	PRIOR CRIMINAL HISTORY		
1.	No prior arrest (other than present offense)	5	____
2.	No arrest in last 5 years (other than present offense)	4	____
3.	No felony convictions or felony or misdemeanor probations	4	____
4.	No arrest for auto theft	4	____
5.	Present offense not checks, burglary, robbery, theft, DWI	3	____
6.	No aliases or tatoos	3	____
7.	No more than 2 prior arrests	4	____
8.	No commitments to a juvenile training school	3	____
9.	No prior jail commitments	3	____
10.	No assaultiveness in prior criminal history	3	____
11.	No arrest prior to age 20	2	____
	TOTAL: PRIOR CRIMINAL HISTORY		____
B.	NARCOTICS, DRUGS AND ALCOHOL		
1.	No history of opiate use (opium, codeine, morphine, herion)	5	____
2.	No history of heroin or cocaine use	5	____
3.	No history of marijuana, amphetamines, LSD, or barviturates	3	____
4.	No history of alcohol involvement in this or prior arrests	4	____
	TOTAL: NARCOTICS, DRUGS AND ALCOHOL		____
C.	EMOTIONAL AND PHYSICAL		
1.	No history of psychological disorders	3	____
2.	No sex offense attributed to personality or emotional disorder	3	____
3.	Sexual adjustment appears normal	2	____
4.	Favorable physical condition (health)	2	____
5.	Favorable physical appearance	1	____
6.	Delinguent behavior not attributed to associates	4	____
7.	Exibits favorable attitude toward probation and future	2	____
	TOTAL: EMOTIONAL AND PHYSICAL		____
D.	EMPLOYMENT AND EDUCATION		
1.	Currently employed or housewife	3	____
2.	Has held present job six months or more	3	____
3.	Has a vocational skill	2	____
4.	Is attending school, receiving a pension, social security, unemployment compensation or unemployed w/medical disability	2	____
5.	Veteran with Honorable Discharge	1	____
6.	Completed high school or has GED	2	____
7.	Has a job commitment (give credit if employed)	1	____
8.	If children involved, suitable care is arranged	2	____
9.	Has a favorable attitude toward work	1	____
	TOTAL: EMPLOYMENT AND EDUCATION		____
E.	FAMILY TIES		
1.	No family criminal record	4	
2.	Lives with spouse or family	2	____
3.	Parents neither separated nor divorced	2	____
4.	Supports spouse and children or self (if single)	2	____
5.	Marital stability-no divorce or seperation (credit if single)	1	____
	TOTAL: FAMILY TIES		____
	TOTAL RATING		____

F. SCALE: Chance of successfully completing probation

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Very Poor	Poor	Average	Good	Very Good

END