

# **PROJECT REPORT #2**

DEVELOPMENT OF THE WISCONSIN RISK ASSESSMENT SCALE



## **DEPARTMENT OF HEALTH AND SOCIAL SERVICES**

CASE CLASSIFICATION/STAFF DEPLOYMENT PROJECT

BUREAU OF PROBATION AND PAROLE

DIVISION OF CORRECTIONS

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CASE CLASSIFICATION/STAFF DEPLOYMENT PROJECT

Box 4405, Madison, Wisconsin 53702

Robert J. Capener . . . . . Project Director

Research Section

S. Christopher Baird, Director

Richard C. Heinz

James McNall

Terri Gregory

Brian Bemus

Joan Peterson

Field Section

Sally McBeath, Supervisor

Ozzie Stern

Rex Peterson

Gene Moen

Belva White

Ann Mikkelson

Ron Garton

Robert Lee

Jane Henson

Ken Hagler

Lucille Klang

To aid in the assignment of a level of supervision, a method of assessing a client's propensity for further criminal behavior was developed. In addition to felony and misdemeanor convictions, the concept of criminal behavior was expanded to include absconsions, rules violations and arrests. Each of these factors was then assigned a weight as illustrated in the following table:

FACTOR	WEIGHT PER OCCURRENCE
Rules Violations . . . . .	1
Arrests . . . . .	1
Misdemeanor Convictions . . . .	3
Absconsions . . . . .	5
Felony Convictions . . . . .	7
Convictions for Assaultive Offenses . . . .	9

Each weighted occurrence was then added to a base score of 1. Scores were cut off at 30 in order to prevent a few very high totals from skewing the data.

Information was collected on approximately 250 randomly selected closed or revoked cases. The data analyzed were, to a large extent, determined by a committee of agents, supervisors, and project staff that was responsible for developing differential supervision levels and criteria for assignment to each level. The collective experience and expertise of that group suggested that "risk" could best be determined through the analysis of the following items:

1. Age at intake
2. Number of prior felony convictions
3. Number of prior misdemeanor convictions
4. Number of prior incarcerations - both adult and juvenile
5. Number of prior periods of probation/parole supervision
6. Number of prior revocations
7. Age at earliest arrest
8. Age at earliest conviction

9. Specific offenses (convictions)
10. Use of a weapon
11. Number of address changes in past year
12. Percentage of time employed
13. Problems in inter-personal relationships
14. Social identification (peer group)
15. Attitude
16. Emotional stability
17. Alcohol Usage/Problems
18. Drug Usage/Problems
19. Ability to meet financial needs
20. Ability to manage finances
21. Response to court or Bureau-imposed conditions
22. Use of community resources

To select the items which would cumulatively provide the best scale for assessing client risk, a multiple linear regression analysis was implemented. Variables were entered in a stepwise fashion.\* The standard error of the estimate was minimized after seven variables were entered. The following table outlines the results:

VARIABLE	MULTIPLE R	R <sup>2</sup>	SIMPLE R	F RATIO
Attitude	.6003	.36	.600	
Age at First Conviction	.7087	.50	.354	
Prior Revocations	.7268	.53	.350	
Alcohol Usage/Problems	.7412	.54	.421	
No. of Address Changes	.7513	.56	.351	
Felony Convictions	.7591	.58	.335	
Prior Periods of Probation/Parole	.7613	.58	.412	34.16*
*Significant at the .01 level				

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\*Two items which proved to be good predictors, Response to Court or Bureau-imposed Conditions and Use of Community Resources, were not entered because they are difficult criteria to assess at intake. (Classification should be completed within 30 days of reception.)

Although the factors analyzed explained only 58% of the variance in criminal behavior, the results proved sufficient to classify clients in less precise rankings. (The analysis could be used to predict low, medium and high degrees of criminal behavior rather than actual scores. "Low" criminal behavior meant a score of two or less on the criminal behavior scale. "High" criminal behavior was defined as a revocation or conviction for a new felony offense during the period of supervision.) Utilizing these rankings and comparing them to predicted scores indicated that, overall, 72% of the cases were "placed" correctly using the resultant regression equation. The following table outlines the percentages correctly placed within each group:

AMOUNT OF CRIMINAL BEHAVIOR PREDICTED	ACTUAL AMOUNT OF CRIMINAL BEHAVIOR REPORTED		
	Low	Moderate	High
Low (Low Supervision)	89%	9%	2%
Moderate (Medium Supervision)	21%	29%	50%
High (Maximum Supervision)	8%	25%	67%

Of the high risk clients misclassified as moderate risks, 3/4 had scores in the upper third of the moderate range. The substantial crossover between the high and medium risk classification scores indicates that this type of client will be difficult to classify.

In an attempt to achieve better results, group means or percentages (depending upon the factor analyzed) were compared for all variables. Based on significant differences and simple correlation coefficients three items were added to the risk scale. They were:

1. Specific offenses (Burglary, Robbery, Auto Theft, Forgery, Worthless Checks, and Theft)
2. Percentage of time employed
3. Drug Usage/Problems

All ten variables comprising the final scale were then assigned weights based on their correlation with criminal behavior. (See Addendum 1) The scale was then tested utilizing the random sample of closed and revoked cases. While the percentage of correct predictions actually declined slightly, it was felt that this may be due primarily to the fact that the weight associated with each independent variable was rounded to a whole number somewhat "blunting" the accuracy of the regression equation.

The following table outlines the results:

AMOUNT OF CRIMINAL BEHAVIOR PREDICTED	ACTUAL AMOUNT OF CRIMINAL BEHAVIOR REPORTED		
	Low	Moderate	High
Low (Low Supervision)	84%	10%	6%
Moderate (Medium Supervision)	32%	27%	41%
High (Maximum Supervision)	10%	24%	66%

CUT-OFF SCORES FOR EACH CLASSIFICATION:

The cut-off scores for each level of supervision were set somewhat low for two reasons. First, an important factor, the actual quality and quantity of supervision given each client, could not be included in the analysis. If a basic assumption of probation and parole (supervision will diminish criminal behavior) is at all valid, then successful completion of probation or parole should be strongly influenced by the degree and type of supervision. The regression analysis left 42% of the variance in criminal behavior unexplained indicating that agent intervention may be a significant factor in decreasing criminal behavior. Secondly, all predictive devices will misclassify some persons. This is regarded as "error" and its probable limits can be stated. However, the "error" term can be manipulated - and with a predictive scale that will result in an assignment of Corrections' clients to a structured supervision level - such manipulation seems essential. It was assumed that in a test situation it would be better to over supervise than to under supervise. Hence, the cut-off scores for each level of supervision were lowered so that nearly all of the "error" occurred with clients being assigned to a higher level of supervision than strict interpretation of an individual score would indicate.

The low cut-off scores resulted in only 5% of the entire sample analyzed being classified lower than their actual probation/parole outcomes warranted. Initial indications are that approximately 50% of all new clients will be scaled as high risk clients.\*

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\*This is based solely on a sample from Dane County and may be somewhat high. Agents have expressed the opinion that Dane County judges make more use of probation than do judges in other counties.

REEVALUATION:

Client risk will be reevaluated every six months using a scale different than that used at intake. (See Addendum 2) The weights assigned to some items have been changed reflecting a decreased emphasis on prior record. Other items have been replaced by better indicators of client risk which agents can readily assess following six months of supervision. In general, factors related to recent behavior increase in importance and factors related to the client's prior record decrease in importance; hence, the client's response to supervision, to a large extent, determines the level of supervision assigned. However, the client's prior record still accounts for 33% of the total points on the reevaluation scale.

Preliminary indications are that the number of clients initially rated as high risks will decline by 40% - 50% at the first reevaluation. This corresponds well with research that indicates that the first six months of supervision are critical. If reevaluation continues to show a decrease in high risk ratings, this will effect a system in which a high percentage of clients will be under maximum supervision for the first six months of probation/parole and that percentage will decrease rapidly as time under supervision increases. The Project's first experience with reevaluation also indicates that while the number of clients rated as medium risks increases at the six month reevaluation, the number of clients rated as low risks remains about the same.

Approximately one-third of the average caseload has been under supervision for less than six months. The following table outlines the effects of the high percentage of clients initially assigned to maximum supervision on a caseload of 60 clients.

	Clients on Probation Less Than Six Months	Clients on Probation Six Months or More	Total
# of Clients	20	40	60
# Classified as Maximum	10 (50%)	10 (25%)	20 (33%)*

\*If the number of clients rates as maximum risks continues to decline at 12, 18 and 24 months under supervision then less than 33% of an average caseload will be rated maximum risks.



ASSESSMENT OF CLIENT RISK

Client Name Last First MI Client Number

Probation Control Date or  
Institution Release Date Month, Day, Year Agent Last Name Number

Date of Evaluation Select the appropriate answer and enter the associated weight in the score column  
Total all scores to arrive at the risk assessment score.

	SCORE
Number of Address Changes in Last 12 Months: . . . . .	0 None 2 One 3 Two or more
Percentage of Time Employed in Last 12 Months: . . . . .	0 60% or more 1 40% - 59% 2 Under 40% 0 Not applicable
Alcohol Usage/Problems: . . . . .	0 No apparent problems 2 Moderate problems 4 Serious problems
Other Drug Usage/Problems: . . . . .	0 No apparent problems 1 Moderate problems 2 Serious problems
Attitude: . . . . .	0 Motivated to change; receptive to assistance 3 Dependent or unwilling to accept responsibility 5 Rationalizes behavior; negative, not motivated to change
Age at First Conviction: . . . . . (or Juvenile Adjudication)	0 24 or older 2 20 - 23 4 19 or younger
Number of Prior Periods of Probation/Parole Supervision: . . . . . (Adult or Juvenile)	0 None 4 One or more
Number of Prior Probation/Parole Revocations: . . . . . (Adult or Juvenile)	0 None 4 One or more
Number of Prior Felony Convictions: . . . . . (or Juvenile Adjudications)	0 None 2 One 4 Two or more
Convictions or Juvenile Adjudications for: . . . . . (Select all applicable and add for score)	2 Burglary 2 Theft 2 Auto theft 2 Robbery 3 Worthless checks 3 Forgery
Conviction or Juvenile Adjudication for Assaultive Offense: . . . . . (An offense which involves the use of a weapon, physical force or the threat of force)	15 Yes 0 No

TOTAL SCORE

REASSESSMENT OF CLIENT RISK

Client Name \_\_\_\_\_ Client Number \_\_\_\_\_  
Last First MI

Date of Reevaluation \_\_\_\_\_ Agent Last Name \_\_\_\_\_ Number \_\_\_\_\_  
Month, Day, Year

Select the appropriate answer and enter the associated weight in the score column. Total all scores to arrive at the risk reassessment score.

		SCORE
Number of Address Changes in Last 12 Months:	0 None	_____
	2 One	_____
	3 Two or more	_____
Age at First Conviction:	0 24 or older	_____
(or Juvenile Adjudication)	1 20 - 23	_____
	2 19 or younger	_____
Number of Probation/Parole Revocations:	0 None	_____
(Adult or Juvenile)	2 One or more	_____
Number of Prior Felony Convictions:	0 None	_____
(or Juvenile Adjudications)	1 One	_____
	3 Two or more	_____
Convictions or Juvenile Adjudications for:	1 Burglary	_____
(Select all applicable and add for score)	1 Theft	_____
	1 Auto theft	_____
	1 Robbery	_____
	2 Worthless checks	_____
	2 Forgery	_____

RATE THE FOLLOWING BASED ON PERIOD OF SUPERVISION ONLY:

Percentage of Time Employed While Under Supervision:	0 60% or more	_____
	1 40% - 59%	_____
	2 Under 40%	_____
	0 Not applicable	_____
Alcohol Usage/Problems:	0 No apparent problems	_____
	2 Moderate problems	_____
	5 Serious problems	_____
Other Drug Usage/Problems:	0 No apparent problems	_____
	1 Moderate problems	_____
	3 Serious problems	_____
Problems in Inter-Personal Relationships:	0 None	_____
(Current Living Situation)	1 Few	_____
	3 Moderate	_____
	5 Severe	_____
Social Identification:	0 Mainly with positive individuals	_____
	3 Mainly with delinquent individuals	_____
Response to Court or Bureau-Imposed Conditions:	0 No problems of consequence	_____
	3 Moderate compliance problems	_____
	5 Has been unwilling to comply	_____
Use of Community Resources:	0 Not needed	_____
	0 Productively utilized	_____
	2 Needed but not available	_____
	3 Utilized but not beneficial	_____
	4 Available but rejected	_____

TOTAL SCORE \_\_\_\_\_



**END**