

REJIS

Regional Justice Information System

812 OLIVE STREET • SUITE 1030

ST. LOUIS, MISSOURI 63101

314/421-1956

THE PRACTICAL AND EFFECTIVE USE OF COMPUTERS IN SOCIAL SERVICE AND SOCIAL SCIENCE

Lawrence A. Boxerman

Norman J. Heying

*Paper presented at Project SEARCH Symposium
on Criminal Justice Information
October 4, 1972
New Orleans, Louisiana*

Direct Inquiries To:

LAWRENCE A. BOXERMAN
Systems Consultant

National Council of Juvenile Court Judges

Box 8000
University of Nevada
Reno, Nevada 89507

(702) 784-6012

28715

ACKNOWLEDGEMENTS

THE GREATER METROPOLITAN ST. LOUIS REGION HAS BEEN IN THE PROCESS OF DEVELOPING A REGIONAL CRIMINAL JUSTICE INFORMATION SYSTEM FOR APPROXIMATELY THREE TO FOUR YEARS. DURING THE PAST TWO TO THREE YEARS THIS SYSTEM HAS DEFINITELY TAKEN ON A REGIONAL FLAVOR. THE OVER-ALL COMPUTER BASED INFORMATION SYSTEM SERVING CRIMINAL JUSTICE AGENCIES IS CALLED REJIS, AN ACRONYM STANDING FOR REGIONAL JUSTICE INFORMATION SYSTEM. REJIS HAS NOTABLE ACCOMPLISHMENTS IN THE LAW ENFORCEMENT FIELD. DURING THE PAST TWO YEARS WITH THE PLANNING AND FORESIGHT OF THE JUDGES WHO WERE ASSIGNED TO THE JUVENILE COURTS (JUDGES NOAH WEINSTEIN AND THEODORE MCMILLIAN) THE JUVENILE COURTS OF ST. LOUIS CITY AND ST. LOUIS COUNTY IN A JOINT EFFORT, HAVE BEEN DEVELOPING AND IMPLEMENTING A JUVENILE INFORMATION SYSTEM CALL JURIS. THIS PAPER IS A DISCUSSION OF THE JURIS SYSTEM, ITS ORIENTATION, ITS OBJECTIVES, ITS ACCOMPLISHMENTS TO DATE AND ITS EXPECTATIONS.

JUVENILE COURTS HAVE AS A PRIME OBJECTIVE THE TREATMENT AND CORRECTION OF JUVENILE OFFENDERS. IT IS GENERALLY RECOGNIZED IN LARGER METROPOLITAN AREAS OF THE COUNTRY THAT A NUMBER OF PROBLEMS EXIST WITH OUR CURRENT JUVENILE SYSTEM WHICH COULD POTENTIALLY BE CORRECTED WITH AN EFFECTIVE INFORMATION SYSTEM THAT IS SENSITIVE, NOT ONLY TO THE INFORMATIONAL NEEDS OF THE JUVENILE COURT AND JUVENILE JUSTICE AUTHORITIES, BUT ALSO IS SENSITIVE TO THE NEED FOR DEVELOPING AND/OR SELECTING MORE EFFECTIVE CORRECTIONAL OR REHABILITATIVE PROGRAMS FOR JUVENILE DELINQUENTS. SOME OF THE PROBLEMS WHICH HAVE BEEN EXPERIENCED IN JUVENILE COURTS ARE AS FOLLOWS:

- A. CHILDREN WHO GET IN TROUBLE ARE SOMETIMES LOST IN THE SYSTEM.
- B. WHEN JUVENILE PROBLEMS ARE RECOGNIZED, JUVENILE AUTHORITIES AS WELL AS SOCIAL AUTHORITIES DO NOT ALWAYS HAVE THE INFORMATION THAT WILL ADVISE THEM OR ASSIST THEM IN DETERMINING THAT WHICH SHOULD BE DONE.
- C. UNSUCCESSFUL SERVICES ARE OFTEN REPEATED AND REPEATEDLY USED BECAUSE THE HISTORICAL INFORMATION RELATIVE TO THE SUCCESS OF THE VARIOUS TREATMENT PROGRAMS WHICH HAVE EVOLVED HAS NOT BEEN RECORDED AND IS NOT KNOWN.
- D. YOUTH HAS BEEN ASKED TO PROVIDE THE SAME INFORMATION OVER AND OVER AGAIN BECAUSE INFORMATION WHICH HAS BEEN PREVIOUSLY GIVEN IS NOT SHARED BETWEEN AGENCIES AND/OR DIFFERENT GEOGRAPHICAL LOCALITIES.

THE NATURE AND SCOPE OF THE JURIS PROJECT IN ST. LOUIS IS ONE IN WHICH THE VARIOUS AGENCIES IN THE LOCALITY HAVE BEEN REQUESTED AND ARE INVOLVED IN A SYSTEMATIC EFFORT TO EXPLOIT THE POTENTIAL USEFULNESS OF COMPUTERIZED INFORMATION SYSTEMS TECHNOLOGY IN THE AREAS OF EXISTING JUVENILE JUSTICE AND YOUTH SERVICE PROGRAMS AND AGENCIES. IT HAS TAKEN INTO CONSIDERATION THE DEVELOPMENT OF NEW SERVICES AND SCIENTIFIC TOOLS WHICH CAN AID JUVENILE AUTHORITIES THROUGH THE USE OF MORE PRECISE SOCIAL SCIENCE STUDIES FOR MORE EFFECTIVE TREATMENT AND CORRECTION OF JUVENILES.

I. INTRODUCTION

I BELIEVE AT THE OUTSET WE MUST RECOGNIZE THAT THE NEEDS OF JUVENILE COURTS FALL INTO THREE DISTINCT COURT FUNCTION CATEGORIES. THEY ARE:

(1) ADMINISTRATIVE ACTIVITIES

(2) JUDICIAL FUNCTIONS, AND

(3) CORRECTIVE FUNCTIONS AND ACTIVITIES;

AND THAT AN INFORMATION SYSTEM THAT IS DEVELOPED MUST BE RESPONSIVE TO THE NEEDS OF ALL THREE OF THESE FUNCTIONAL ACTIVITIES IN THE JUVENILE COURT FOR IT TO TRULY BE A MANAGEMENT INFORMATION SYSTEM. OF THESE THREE, HOWEVER, THE MOST SIGNIFICANT AND IMPORTANT TO SOCIETY IS THE DEVELOPMENT OF TOOLS AND AIDS WHICH WILL IMPROVE THE PERFORMANCE OF THE CORRECTIVE FUNCTION OF JUVENILE DELINQUENCY TREATMENT. THIS INCLUDES AS ONE OF THE METHODS FOR IMPROVEMENT, THE ADOPTION OF COMPUTER TECHNIQUES TO SOCIAL SCIENCES AND SOCIAL SERVICES. I THINK IT SHOULD FURTHER BE UNDERSTOOD THAT ALTHOUGH CHILDREN ARE COMPLEX THEY ARE MALLEABLE AND, THEREFORE, A COMPUTER BASED SYSTEM WHOSE OBJECTIVE IS THE CORRECTION OF OFFENDING JUVENILES MUST BE ABLE TO MEASURE PRECISE CHANGES IN BEHAVIOR AND BEHAVIOR PATTERNS, WHICH WHEN ANALYZED AND REVIEWED WILL AID IN SELECTING ACTION FOR REHABILITATION. THE SYSTEM MUST ALSO IDENTIFY THE "NEEDS" OF THE CHILDREN SO THAT RESPONSIBLE AND RESPONSIVE "HIGHEST PROBABILITY" REHABILITATION PROGRAMS CAN BE SELECTED. THESE TREATMENT PROGRAMS THAT ARE SELECTED

MUST FULFILL THE NEEDS OF CHILDREN AND THEY MUST ASSIST IN THE DETERMINATION OF "HOW TO CORRECT THE CHILD" RATHER THAN DETERMINE "WHY DID THE CHILD GO WRONG." THE SYSTEM MUST CAPTURE THE INFORMATION NECESSARY TO EVALUATE THE BEHAVIOR CHARACTERISTICS OF JUVENILES ENTERING THE SYSTEM AND BE ABLE TO CORRELATE THESE CHARACTERISTICS WITH HISTORICALLY SUCCESSFUL TREATMENT. THE SYSTEM MUST FOLLOW THE CHILD AS WELL AS A CASE THROUGHOUT THE ENTIRE SYSTEM. IT MUST FOLLOW HIS RECIDIVISM OR HIS SUCCESSFUL TREATMENT. IT MUST THEN USE THAT INFORMATION WHICH IT GATHERS FOR FURTHER SOPHISTICATION AND IMPROVED PRECISION IN SELECTING TREATMENT PROGRAMS FOR SUCCESSFUL CORRECTION OF JUVENILES.

II. COMPUTER CHARACTERISTICS

A. THE CHARACTERISTICS OF COMPUTERS WHICH PERMIT EFFECTIVE USE OF THESE DEVICES IN SOCIAL SCIENCES AND SOCIAL SERVICES SHOULD BE REVIEWED FOR A FULL APPRECIATION OF THEIR POTENTIAL AND CAPABILITY IN THIS FIELD. THE SIGNIFICANT CHARACTERISTICS WHICH SHOULD BE RECOGNIZED ARE AS FOLLOWS:

1. INFORMATION STORAGE CAPABILITY--COMPUTER SYSTEMS HAVE THE ABILITY TO STORE SIGNIFICANT, VAST, AND PRECISE AMOUNTS OF DATA. INASMUCH AS BEHAVIOR TRENDS, BEHAVIOR CHARACTERISTICS, AND SOCIAL BEHAVIOR IS A VERY, VERY, COMPLEX SUBJECT WHICH HAS BEEN STUDIED FOR YEARS AND YEARS BY SOCIOLOGISTS, PSYCHOLOGISTS, AND SOCIAL PSYCHOLOGISTS, WE KNOW THAT THE MEASUREMENT OF THOSE PHENOMENA REQUIRE EXTENSIVE AMOUNTS OF PRECISE DATA MAINTAINED IN ORGANIZED FORM. THESE SAME SCIENTISTS

HAVE CONCLUDED THAT HUMAN BEHAVIOR IS A VERY COMPLEX AND HIGHLY UNPREDICTABLE ACTIVITY AND THAT CONVENTIONAL AND MANUAL METHODS FOR COLLECTING AND MEASURING REACTION AND BEHAVIOR HAVE BEEN EXTREMELY DIFFICULT.

2. INFORMATION PRESENTATION CAPABILITY--COMPUTERS CAN PRESENT INFORMATION AND DATA FACTS IN PRINTED FORM REPORTS, CATHODE RAY TUBE SCREEN DISPLAYS (TELEVISION SCREEN DISPLAY) AND VOICE RESPONSE. THE LAST TWO OF THESE ARE ON AN IMMEDIATE INFORMATION RETRIEVAL AND PRESENTATION BASIS.

3. COMPUTATIONAL CAPABILITY--COMPUTERS HAVE COMPUTING CAPABILITY---TO ASSIST IN THE ASSIMILATION, ANALYSIS AND PRESENTATION OF SOCIAL DATA. FOR EXAMPLE:

- a. LOGIC
- b. ARITHMETIC
- c. OBJECTIVE COMPUTATION AND COMPILATION
- d. RAPID HANDLING OF LARGE VOLUMES OF DATA
- e. CORRELATION AND TRENDING
- f. SIMULATION
- g. FORECASTING AND PREDICTING

B. COMPUTERS, ALTHOUGH VERY FAST AND ACCURATE WILL ONLY BE BENEFICIAL TO SOCIAL WORKERS IF THEY CAN HELP IN DAY TO DAY ACTIVITIES. SOME OF THE PRACTICAL USES OF COMPUTERS IN A SOCIAL SCIENCE ENVIRONMENT ARE AS FOLLOWS:

1. ADMINISTRATIVE/SOCIAL SERVICE INFORMATION STORAGE
AND RETRIEVAL.

- a. CENSUS OF CASES
- b. INDEXES OF REGISTERS OF SERVICE CAPABILITIES
 - (1) AVAILABLE SERVICES REGISTER
 - (2) TYPES OF SERVICES INDEXES
 - (3) LOCATIONS OF SERVICES AVAILABLE
 - (4) SCOPE OF SERVICES AVAILABLE FROM VARIOUS SOURCES
- c. SERVICE CALL SCHEDULING FOR SOCIAL WORKERS

2. SOCIAL SCIENCES

- a. RELATIVE RANKING OR GRADING OF SUBJECTS
- b. IDENTIFICATION OF HISTORICAL PATTERNS
- c. CORRECTION TREATMENT SELECTION
- d. OFFENSE PREVENTION

III. SOCIAL SCIENCE APPLICATIONS

A. THE MOST VALUABLE USES OF COMPUTERS IN SOCIAL SCIENCES ARE IN THE FIELD OF SOCIAL SCIENCE APPLICATIONS BECAUSE OF THEIR POTENTIAL IMPROVEMENT EFFECT ON AND FOR SOCIETY. THOSE FUNCTIONAL USES WHICH HAVE THE GREATEST PROMISE ARE AS FOLLOWS:

- 1. CORRECTIVE TREATMENT PROGRAM SELECTION--THE SELECTION OF A TREATMENT PROGRAM WHICH HAS THE HIGHEST PROBABILITY OF SUCCESS FOR A GIVEN BEHAVIOR PROFILE SUBJECT. THE SELECTION OF A TREATMENT PROGRAM SHOULD BE THE RESULT OF CORRELATION STUDIES MADE OVER A SIGNIFICANT PERIOD

OF TIME AND WITH A SIGNIFICANT AMOUNT OF DATA TO MAKE SURE THAT THE CONCLUSIONS HAVE BEEN VALIDATED. THIS CAPABILITY PROBABLY REQUIRES A FORM OF MULTIPLE LINEAR REGRESSION CORRELATION ANALYSIS FOR ASSURANCE THAT ALL CHANGES IN PATTERN AND TREND HAVE BEEN TAKEN INTO CONSIDERATION.

2. PROGRAM INTERRUPT AND CHANGE INDICATORS--THE ABILITY TO RECOGNIZE AN INEFFECTIVE TREATMENT PROGRAM THAT IS BEING USED ON A SUBJECT AND THE ABILITY TO SELECT AN ALTERNATE TREATMENT PROGRAM WHICH HAS A HIGHER PROBABILITY OF SUCCESS.
3. CASE LOADING--SELECTION OF THE WORKER OR SOCIAL SERVICE WORKER WHO HAS THE BEST PROBABILITY OF CORRECTING THE OFFENDER BECAUSE OF HIS SKILLS, EXPERIENCE AND CURRENT CASE LOAD.
4. RESEARCH--THE ABILITY TO GAIN INSIGHT INTO THE EFFECTIVENESS OF SOCIAL CORRECTION PROGRAMS AND VARIOUS WORKER APPROACHES.
5. PREVENTION--THAT IS
 - a. PREDICTING WHERE TO EXPECT OFFENSES,
 - b. PREDICTING HOW MANY OFFENSES TO EXPECT IN VARIOUS LOCALITIES, AND
 - c. PREDICTING WHO WILL BE THE OFFENDERS FROM THE BEHAVIOR PROFILES OF VARIOUS SUBJECTS IN THAT LOCALITY.

THEREFORE, PREVENTIVE MEASURES CAN BE TAKEN AND,

CONSEQUENTLY, FEWER CORRECTIONAL MEASURES WILL BE NEEDED.

THE USE OF COMPUTERS FOR CORRECTIVE TREATMENT PROGRAM SELECTION AND FOR PREDICTING THE SUCCESS OF TREATMENT REQUIRES THE FOLLOWING:

1. BEHAVIOR PROFILING--BEHAVIOR PROFILING MUST BE CUSTOMIZED TO DEMOGRAPHIC AND GEOGRAPHIC SITUATIONS AND CONDITIONS. IT MUST ALSO BE MULTI-DIMENSIONAL. IT IS OUR FIRM CONVICTION THAT BEHAVIOR PROFILING WILL ONLY BE EFFECTIVE IF IT IS A RELATIVE MEASURE.
 2. CORRELATION OF SUBJECT BEHAVIOR PROFILE WITH:
 - a. OFFENDER BEHAVIOR PROFILE
 - b. OFFENDER CORRECTION
 - c. TREATMENT SUCCESS OR FAILURE
 - d. COUNSELOR CAPABILITY
 3. THE USE OF CORRELATION FOR TREATMENT SELECTION THROUGH CORRELATED PROFILES AND SUCCESSFUL TREATMENT
 4. MEASURING SUCCESS
- C. PREVENTIVE PREDICTION--PREVENTIVE PREDICTION INCLUDES THE DETERMINATION THROUGH THE IDENTIFICATION OF BEHAVIOR PROFILES AND ENVIRONMENTAL CONDITIONS WHICH WILL PERMIT PREDICTION BY SOCIAL AUTHORITIES OF THE FOLLOWING:
1. WHERE WILL OFFENSES TAKE PLACE
 2. HOW MANY OFFENDERS WILL THERE BE IN THE VARIOUS LOCALITIES

3. WHAT IS THE PROFILE OF THE POTENTIAL OFFENDERS AND WHO ARE THEY
 4. PRE-DELINQUENT OR PRE-OFFENSE ATTENTION
- D. SOCIAL IMPACT--THE SOCIAL IMPACT OF THE FULL IMPLEMENTATION AND UTILIZATION OF THIS KIND OF PROGRAM WILL BE:
1. SUCCESSFUL REHABILITATION
 2. SUCCESSFUL CORRECTION
 3. IDENTIFICATION OF PRE-OFFENDERS
 4. THE ABILITY TO TAKE PREVENTIVE OR PRE-DELINQUENT ACTION

IV. ST. LOUIS REGION JUVENILE INFORMATION SYSTEM

WITH THE CONCEPTS IN MIND AS STATED IN THE PREVIOUS CHAPTER AND WITH RECOGNITION FOR THE CAPABILITIES OF COMPUTER SYSTEMS, THE ST. LOUIS REGIONAL JUVENILE REFERRAL INFORMATION SYSTEM, JURIS, HAVE BEEN DESIGNED TO SERVE THE ADMINISTRATIVE, JUDICIAL AND CORRECTIONAL ACTIVITIES AND OBJECTIVES OF THE COURT. THE SYSTEM OBJECTIVES ARE COINCIDENT WITH AND COMPLEMENTARY TO THOSE OF THE COURT. THE SPECIFIC JURIS OBJECTIVES, AS ESTABLISHED AT THE BEGINNING OF THE SYSTEM'S DESIGN EFFORT ARE AS FOLLOWS:

- A. TO COLLECT, STORE AND PRESENT THE ACTIVITY STATUS AND PERFORMANCE INFORMATION WHICH WILL AID COURT MANAGEMENT IN ITS OBJECTIVES OF OPTIMUM EFFECTIVENESS AND EFFICIENCY.
- B. TO AUTOMATE THE REPETITIVE CLERICAL OPERATIONS, SO THAT:
 1. THE COURT CAN ALLOCATE MORE OF ITS RESOURCES TO CORRECTIONAL ACTIVITY AND LESS TO PAPER HANDLING AND FILING.

2. THAT EMPLOYEES OF THE COURT CAN UTILIZE THEIR TIME MORE CONSTRUCTIVELY AND EFFECTIVELY.
 3. PROCEDURAL DISCIPLINES ARE ESTABLISHED WHICH INSURE COMPLETE AND ACCURATE INFORMATION.
- C. TO PROVIDE FILES OF INFORMATION WHICH ARE COMPLETE, ACCURATE, AND RAPIDLY ACCESSIBLE TO THOSE WHO HAVE A NEED TO KNOW.
 - D. TO PROVIDE AN AID OR TOOL TO THE COURT WHICH SCIENTIFICALLY DETERMINES CORRELATIONS BETWEEN CHILD'S CHARACTERISTICS, BEHAVIOR, CHILD CORRECTION HISTORY, AND CAN THEREBY ASSIST IN THE SELECTION OF CORRECTION PROGRAMS WHICH HAVE THE HIGHEST PROBABILITY OF SUCCESS.

JURIS HAS BEEN DESIGNED AS A SYSTEM COMPOSED OF A SERIES OF INTEGRATED BUT INDEPENDENT SUBSYSTEMS OR MODULES. EACH MODULE PERFORMS AND SERVES A SPECIFIC FUNCTION, BUT ALL MODULES ARE INTERDEPENDENT PARTS OF THE TOTAL INFORMATION SYSTEM. THE SYSTEM IS COMPOSED OF SEVEN FUNCTIONAL MODULES USING SIX INFORMATION FILES. THE SEVEN SUBSYSTEMS ARE:

- A. A FILE MAINTENANCE MODULE
- B. A DATA RETRIEVAL MODULE
- C. A REFERRAL AND RECOMMENDATION MODULE
- D. AN ADMINISTRATIVE CONTROL MODULE
- E. A STATISTICS REPORTING MODULE
- F. A COUNSELOR EVALUATION MODULE
- G. A CORRECTIONAL PROBABILITY AID MODULE

JURIS OPERATES AS A TELEPROCESSING BASED SYSTEM AND PROVIDES EACH COURT WITH THE ON-LINE CAPABILITY FOR DATA RETRIEVAL AND FOR THE UPDATE OF DYNAMIC INFORMATION. EACH COURT HAS BEEN PROVIDED WITH REMOTE BATCH CAPABILITY FOR THE INPUT OF VOLUME AND NONDYNAMIC DATA AND FOR THE PRODUCTION OF VOLUME OUTPUT REPORTS. THE ON-LINE TERMINALS WILL PRODUCE BOTH SOFT AND HARD COPY OUTPUT. THE REMOTE BATCH TERMINALS PRODUCE PRINTED HARD COPY OUTPUT. THE SYSTEM IS ORIENTED TO SERVICE THE ADMINISTRATIVE, OPERATIONAL, COUNSELOR, AND TREATMENT SELECTION AND PREVENTION ACTIVITIES OF THE COURT.

V. CORRECTIONAL PROBABILITY AID MODULE

THE CORRECTIONAL PROBABILITY AID MODULE CONTAINS THE CORRELATION ANALYSIS PROGRAMS WHICH COMPUTE CORRELATIONS BETWEEN A CHILD'S CHARACTERISTICS AND DELINQUENT BEHAVIOR, DELINQUENT CORRECTION TREATMENT PROGRAM SUCCESS AND COUNSELOR TYPE (SKILLS, APPROACH, ETC.). THE SUBSYSTEM WILL BE USED FOR:

- A. TREATMENT PROGRAM SELECTION--SELECTION OF THE TREATMENT PROGRAM WHICH HAS THE HIGHEST PROBABILITY OF SUCCESS WITH A CHILD'S SPECIFIC HISTORY AND CHARACTERISTICS AND FOR WHICH THE BEST PROBABILITY OF CORRECTION CAN BE PREDICTED.
- B. CORRECTION PROGRAM INTERRUPT CHANGE.
- C. CASE LOADING SELECTION OF THE DJO AS THE PROBABILITY OF CORRECTING WITH THE CHILD BECAUSE OF SKILLS AND CURRENT CASE LOAD.
- D. RESEARCH.

E. PROFILE OF THE DELINQUENT FOR:

1. PREDICTING WHERE TO EXPECT OFFENSES.
2. PREDICTING HOW MUCH TO EXPECT.
3. PREDICTING WHO TO EXPECT, SO THAT PREVENTIVE MEASURES CAN BE TAKEN AND CONSEQUENTLY FEWER CORRECTIONAL MEASURES WILL BE NEEDED.

BEFORE GETTING INTO THE BEHAVIOR CORRELATION ANALYSIS PORTION OF THE PROGRAM, WE SHOULD TAKE A MOMENT TO RELATE A BYPRODUCT BENEFIT THAT HAS BEEN PROVIDED IN THE BEHAVIOR CORRELATION MODULE TO THE JUVENILE COURTS IN ST. LOUIS FOR IMPROVED SOCIAL SERVICE TO JUVENILES. WE HAVE A CAPABILITY WHICH PERMITS THE BOOKING AGENT OR SOCIAL WORKER ON DUTY AT THE TIME THAT A JUVENILE IS PRESENTED TO THE COURT FOR INCARCERATION TO DETERMINE WHETHER THE CHILD REALLY SHOULD OR SHOULD NOT BE INCARCERATED. THE TECHNIQUE WORKS THIS WAY. THE COUNSELOR ENTERS A CODE CALLING UP A HOLD/NO HOLD MASK ONTO THE CATHOD RAY TUBE SCREEN. THIS MASK CONTAINS A NUMBER OF QUESTIONS WHICH CAN BE ANSWERED EITHER YES OR NO. AS SOON AS ALL OF THE QUESTIONS ARE ANSWERED, THE SCORES ARE REVIEWED. ANY POSITIVE SCORE IN ANY FIELD MEANS THAT THE CHILD SHOULD INDEED BE INCARCERATED AND DETAINED OVERNIGHT PENDING AN ADJUDICATION OR INCARCERATION HEARING. IF ANY DIFFICULTY IS ENCOUNTERED THE COURT ADMINISTRATOR OR SOCIAL SERVICE WORKER IS CALLED. THIS IS KIND OF A MUNDANE CAPABILITY, BUT IT HAS PROVED TO BE EXTREMELY BENEFICIAL AND FAIR FOR MAKING DETENTION DECISIONS.

THE TREATMENT SELECTION PORTION OF THE CORRECTIONAL PROBABILITY AID MODULE WORKS AS FOLLOWS. EVERY CHILD THAT IS REFERRED TO THE COURT HAS A BEHAVIOR PROFILE INDEX RATING CALCULATED FOR HIM. THIS INDEX RATING IS THE COMPILATION OF WEIGHTS AND VALUES RESULTING FROM HIS

- (1) PAST OFFENSE RECORD,
- (2) PERSONAL HISTORY INFORMATION,
- (3) SOCIAL HISTORY INFORMATION,
- (4) ECONOMIC INFORMATION, AND
- (5) PSYCHOLOGICAL PROFILE INFORMATION.

ALL OF THE WEIGHTS AND CHARACTERISTICS FOR THE CHILD ARE CARRIED IN WHAT WE CALL THE PESP (PERSONAL, ECONOMIC, SOCIAL, AND PSYCHOLOGICAL) FILE. HIS OFFENSE WEIGHTS AND HISTORY IS CARRIED IN THE BASE FILE OF THE SYSTEM. ALL OF THE WEIGHTS ARE ADDED TOGETHER TO CALCULATE A BEHAVIOR PROFILE. THIS BEHAVIOR PROFILE IS RECORDED IN HIS BASE RECORD, SUCH THAT ALL JUVENILES WHO CONSTITUTE THE DATA BASE FOR THE JUVENILE COURT INFORMATION SYSTEM DO HAVE A BEHAVIOR PROFILE INDEX, WHICH IS REALLY A RELATIVE RATING OF SOCIAL ADJUSTMENT OR MALADJUSTMENT FOR THE CHILD. ON A DAILY BASIS EACH ONE OF THESE INDICES ARE ARRANGED IN MATRIX FORM AND SUCCESSFUL TREATMENT OR RECIDIVISM ARE CALCULATED AND MEASURED AGAINST THAT MATRIX. THE LOGIC THAT WE USE FOR DETERMINING RECIDIVISM OR SUCCESSFUL TREATMENT IS AS FOLLOWS. IF A CHILD HAS STAYED OUT OF TROUBLE, (HAS NOT HAD ANY REPEAT OFFENSES) FOR A PERIOD OF FOURTEEN MONTHS, IT IS

CONSIDERED A SUCCESSFUL TREATMENT. IF, HOWEVER, IN THAT PERIOD OF TIME HE HAS HAD A REPEAT OFFENSE, IT IS CONSIDERED A RECIDIVISTIC INCIDENT. THE RESULTS OF THIS CORRELATION ANALYSIS WHICH IS RUN ON A DAILY BASIS ARE STORED IN THIS MATRIX. THIS MATRIX HAS THE TREATMENT PROGRAMS ACROSS THE "X" AXIS AND THE BEHAVIOR PROFILE INDICES DOWN THE "Y" AXIS. AT THE INTERSECTION OF EACH TREATMENT PROGRAM AND BEHAVIOR PROFILE INDEX, WE HAVE CALCULATED THE PERCENT OF SUCCESSFUL CORRECTION AND THE PERCENT OF UNSUCCESSFUL CORRECTION FOR THOSE TWO FACTORS. THIS PERMITS INQUIRY INTO THE SYSTEM BY A SOCIAL WORKER WHO NEEDS TO MAKE A DECISION RELATIVE TO THE BEST TREATMENT PROGRAM TO:

- (1) SELECT FOR A GIVEN CHILD,
- (2) DISPLAY THAT CHILD'S BEHAVIOR PROFILE RATING,
AND
- (3) DISPLAY THE TWELVE HIGHEST PROBABILITY OF SUCCESS
TREATMENT PROGRAMS WHICH CAN BE USED FOR THE
CHILD.

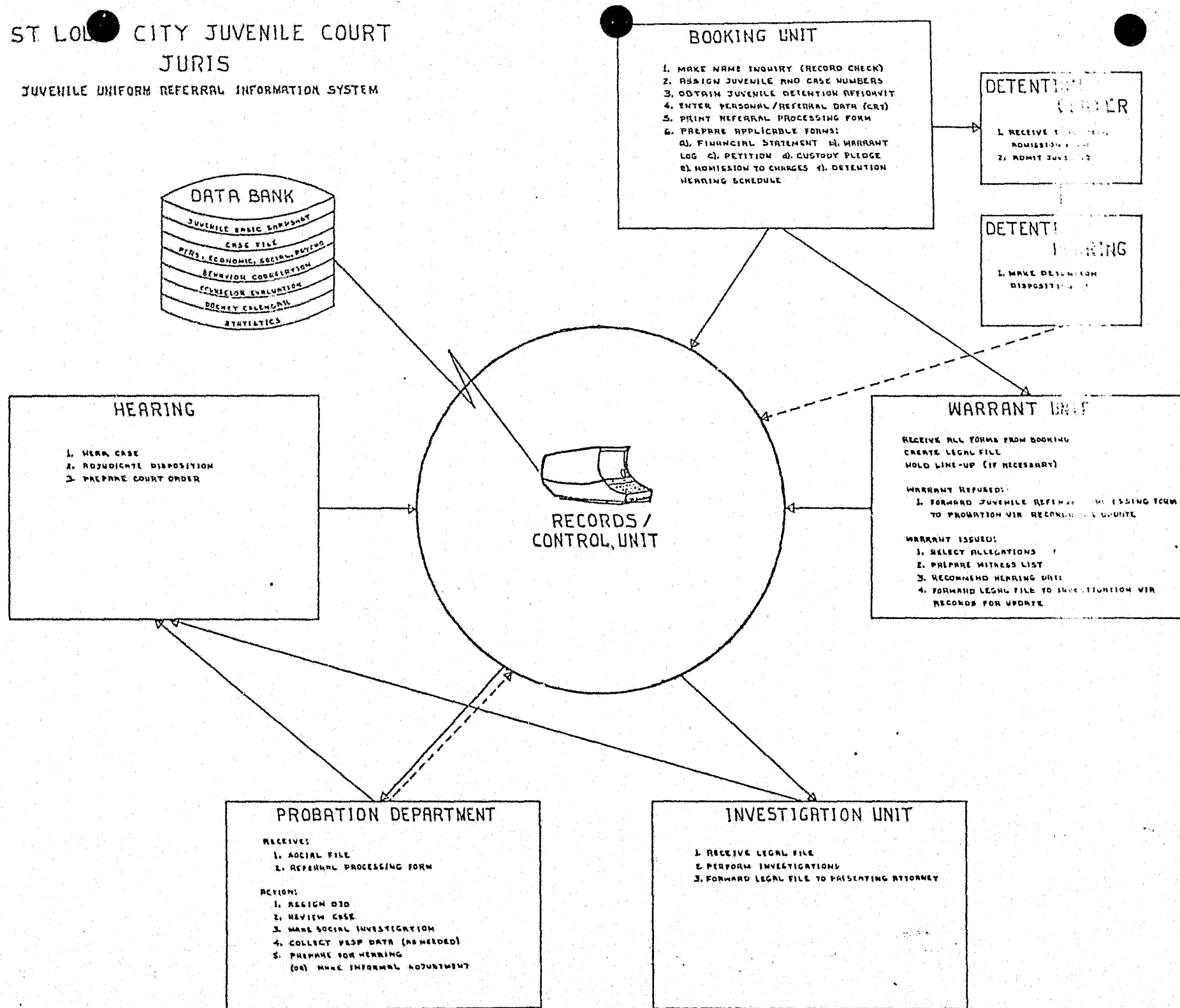
IN THE COUNSELOR EVALUATION FILE WE CARRY ALL OF THE COUNSELOR CHARACTERISTICS AND WILL IN SUBSEQUENT YEARS DEVELOP THE CORRELATIONS WHICH PERMIT SUCCESSFUL MATCHING OF COUNSELORS TO BEHAVIOR PROFILE INDEX TYPE CHILDREN.

VI. CONCLUSION

THE CORRECTIONAL PROBABILITY AID MODULE OF THE JURIS SYSTEM IS IN TERMS OF SCIENTIFIC RESEARCH JUST AN INFANT. IT WAS DEVELOPED AFTER A SIGNIFICANT AMOUNT OF STUDY, ANALYSIS, AND DETERMINATION OF THAT WHICH WOULD BE MOST BENEFICIAL FOR JUVENILE CORRECTION AND JUVENILE REHABILITATION. WE CANNOT SAY WITH CERTAINTY THAT IT IS AT THIS POINT A SUCCESSFUL PROGRAM. WE CAN SAY WITH CERTAINTY THAT IT IS A STEP IN THE RIGHT DIRECTION---TO DETERMINE THROUGH THE USE OF THE LATEST SCIENTIFIC TECHNOLOGICAL CAPABILITIES ALONG WITH INSIGHT OF HUMAN COUNSELING AN IMPROVED ABILITY TO CORRECT JUVENILE OFFENDERS, REMEDY SOCIAL SITUATIONS AND CIRCUMSTANCES THAT BREED AND PERPETUATE SOCIAL DEVIATION AND SOCIAL MALADJUSTMENT AND TO GAIN ENOUGH SCIENTIFIC INSIGHT AND SCIENTIFIC FACT WHICH WILL ALLOW US TO PREDICT WHERE OFFENSES ARE GOING TO TAKE PLACE, HOW MUCH WILL TAKE PLACE, AND WHAT THE PROFILE OF THE OFFENDER WILL BE. ONCE WE, AS SOCIETY, HAVE GOTTEN TO THAT POINT (AND HOPEFULLY THE JURIS SYSTEM WILL BE ONE OF THE PRIME CONTRIBUTORS TO THAT UNIVERSE OF DATA) WE WILL HAVE DEVELOPED A TREMENDOUSLY POWERFUL AND "SOCIAL GOOD" TOOL FOR THE GREATER ST. LOUIS AREA AND FOR SOCIETY AS A WHOLE.

ST LOUIS CITY JUVENILE COURT JURIS

JUVENILE UNIFORM REFERRAL INFORMATION SYSTEM



CORRECTIONAL PROBABILITY

AID MODULE

TECHNIQUE

EXAMPLE

DETENTION

HOLD - NO HOLD

DECISION

AID

DETENTION DECISION AID - NO.1

LINE 1
LINE 2
LINE 3

HAS THE CHILD BEEN REFERRED FOR ANY OF THE FOLLOWING REASONS

NON CHRONIC RUNAWAY .

_____ (Y or N)

LINE 4

TRUANCY

_____ (Y or N)

LINE 5

LOITERING

_____ (Y or N)

LINE 6

TRAFFIC

_____ (Y or N)

LINE 7

PSYCHOLOGICAL TESTING

_____ (Y or N)

LINE 8

TREATMENT

_____ (Y or N)

LINE 9

IF "Y" IN ANY FIELD DISPLAY "RECOMMEND THAT CHILD BE RELEASED"

IF "N" IN ALL FIELDS DISPLAY MASK TWO

DETENTION DECISION AID - NO. 2

LINE 1

LINE 2

CHILD IS AN INSTITUTIONAL RUNAWAY

LINE 3

UNABLE TO CONTACT RESPONSIBLE PERSON

LINE 4

PARENTS REFUSE TO ACCEPT

LINE 5

RUNAWAY FROM OTHER STATE

LINE 6

SUICIDE ATTEMPT

LINE 7

THREE OR MORE FELONY REFERRALS IN PAST 12 MONTHS

LINE 8

TWO OR MORE FELONY REFERRALS IN PAST 8 WEEKS

LINE 9

ONE OR MORE FELONY REFERRALS IN PAST 4 WEEKS

LINE 10

THERE IS SUBSTANTIAL REASON TO BELIEVE CHILD DIRECTLY
INVOLVED IN MAJOR OFFENSE

LINE 11

CHILD UNDER SUPERVISION OR SUSPENDED COMMITMENT--DISP.
WITHIN PAST 4 MONTHS

LINE 12

IF "Y" IN ANY FIELD DISPLAY - "DETENTION RECOMMENDED"
"CALL RESPONSIBLE COUNSELOR"

IF "N" IN ALL FIELDS DISPLAY MASK 3

DETENTION DECISION AID - NO. 3

HOME SUPERVISION IS INADEQUATE

CHILD IS NOT ATTENDING SCHOOL AND IS NOT EMPLOYED

PARENTS REQUEST DETENTION PENDING COURT HEARING OR
INTERVIEW

CHILD HAS FAILED TO APPEAR AT PREVIOUS HEARINGS

PARENTS IRRESPONSIBLE IN PAST

LINE 1

LINE 2

LINE 3

LINE 4

LINE 5

LINE 6

LINE 7

IF ALL ARE "Y" DISPLAY "DETENTION RECOMMENDED"

"CALL RESPONSIBLE COUNSELOR"

IF "N" IN ANY SPACE DISPLAY "RECOMMEND THAT CHILD BE RELEASED"

TREATMENT SELECTION

ASSISTANCE

CAPABILITY

A. BEHAVIOR PROFILE - WEIGHTS (EXAMPLE)

1. OFFENSE/RECORD

THE TOTAL OF THE WEIGHTS OF ALL OFFENSES ON THE
SUBJECTS RECORD

| <u>OFFENSE</u> | <u>WEIGHT</u> |
|----------------|---------------|
| BURGULARY | 7 |
| ASSAULT | 8 |
| RUNAWAY | <u>2</u> |
| TOTAL | 17 |

2. PERSONAL, SOCIAL, ECONOMIC, AND PSYCHOLOGICAL
CHARACTERISTICS (EXAMPLES)

a. HAS FAMILY HAD A NEGLECT REFERRAL

| | <u>CATEGORY</u> | <u>WEIGHT</u> |
|------|------------------------------|---------------|
| | A NO | 0 |
| | B YES - ADJUSTED | 2 |
| ITEM | <u>X</u> C YES - ADJUDICATED | 4 |
| | D YES - MULTIPLE | 8 |

b. CHILDS ATTITUDE TOWARD CURRENT OFFENSE

| | <u>CATEGORY</u> | <u>WEIGHT</u> |
|--------|------------------------|---------------|
| | A REMORSEFUL | 1 |
| | B FRIGHTENED | 2 |
| | C NEUTRAL | 3 |
| ITEM 1 | <u>X</u> D INDIFFERENT | 4 |
| | E BLAMELESS | 5 |

BEHAVIOR PROFILE SCORE $17 + 4 + 4 = 25$

B. CANCELLATION MATRIX

| B E H A V I O R P R O F I L E | TREATMENT PROGRAMS | | | | |
|---|--------------------|----|----|----|----|
| | | A | B | C | D |
| | 0 - 5 | 25 | 30 | 41 | 26 |
| | | 20 | 25 | 28 | 52 |
| | | 56 | 55 | 59 | 33 |
| | 6 - 10 | 70 | 80 | 64 | 52 |
| | | 35 | 20 | 48 | 58 |
| | | 67 | 80 | 57 | 47 |
| | 11 - 15 | 30 | 20 | 42 | 21 |
| | | 76 | 80 | 65 | 47 |
| | | 28 | 20 | 39 | 31 |
| | 16 - 20 | 71 | 64 | 37 | 36 |
| | | 11 | 23 | 59 | 34 |
| | | 87 | 74 | 39 | 51 |
| | 21 - 25 | 17 | 9 | 14 | 47 |
| | | 42 | 28 | 53 | 29 |
| | | 29 | 24 | 21 | 62 |
| | 26 - 30 | 61 | 47 | 79 | 73 |
| | | 12 | 32 | 9 | 27 |
| | | 84 | 59 | 90 | 73 |
| | | | | | |

C. TREATMENT PROGRAM SELECTION

1. PRESENT TO COMPUTER

A. CHILD'S BEHAVIOR PROFILE

2. COMPUTER

A. SCANS MATRIX FOR THE FOUR TREATMENT PROGRAMS WITH THE HIGHEST PROBABILITY OF SUCCESS

EXAMPLE

BEHAVIOR PROFILE = 25

| | <u>TREATMENT PROGRAM</u> | <u>SUCCESS PROBABILITY</u> |
|---|------------------------------|--------------------------------|
| 1 | D | 62% |
| 2 | A | 29% |
| 3 | B | 24% |
| 4 | C | 21% |

END

7 dble./mm