

NORMS AND RECIDIVISM FOR FIRST INCARCERATES:  
IMPLICATIONS FOR PROGRAMMING

By

PAUL GENDREAU

*Rideau Correctional Centre*

PATRICK MADDEN

*Planning and Research Branch*

MARY LEIPCIGER

*Planning and Research Branch*



Ontario

MINISTRY OF  
CORRECTIONAL  
SERVICES

Honourable Frank Drea  
Minister  
Glenn R. Thompson  
Deputy Minister

59/87

MINISTRY OF CORRECTIONAL SERVICES

PROVINCE OF ONTARIO



PLANNING AND SUPPORT SERVICES DIVISION

M. J. Algar,  
Assistant Deputy Minister

PLANNING AND RESEARCH BRANCH

James J. Hug, Ph.D.,  
Director

A.C. Birkenmayer  
Chief, Research Services

November 1977

**NCJRS**

JUL 11 1979

**ACQUISITIONS**

ACKNOWLEDGMENTS

This report was funded by Project #22, Planning and Research Branch, Ontario Ministry of Correctional Services.

We appreciate the support given the project by Guelph Correctional Centre officials and Andy Birkenmayer, J. J. Hug, and Leah Lambert. In particular we would like to thank Steve Collins and Mary Armstrong for collecting much of the data. Don Kennedy and Brian Grant contributed to the preparation of the manuscript.

The first author is Regional Co-ordinating Psychologist, Rideau Correctional Centre, Ontario Ministry of Correctional Services, Ms. Leipciger is with the National Parole Service and Mr. Madden is Research Assistant, Planning and Research Branch, Ontario Ministry of Correctional Services.

## ABSTRACT

The study deals with 802 inmates admitted to the Guelph Correctional Centre during 1970-71. Social history and institutional experience information and the recidivism rates associated with these factors are reported. The sample was primarily young, single and although this was their first incarceration many had previous convictions either as juveniles or adults. Most had experienced family problems and family instability. Problems encountered in school and limited work histories were common. Just under 40% reported drug and alcohol use with onset occurring at an early age. A notable finding was that very few of the sample or their families received help from existing social agencies.

Those factors most associated with recidivism were age, prior criminality, work history, institutional behavior and the age at which alcohol or drug use began. These recidivism rates were compared to those collected previously in Canada and elsewhere and discussed in terms of their relevance to current correctional theory.

Recommendations for correctional programming were made in the areas of social services in the community, increased vocational training in the institution, more realistic use of psychiatric history data and systems information development.

TABLE OF CONTENTS

Introduction . . . . .	1
Method . . . . .	2
Findings . . . . .	3
1. Personal Demography . . . . .	4
2. Living Situations as a Child. . . . .	6
3. Situation at the Time of Offence . . . . .	11
4. Education and Work History of Parents. . . . .	12
5. Educational Background . . . . .	14
6. Work Experience . . . . .	17
7. Medical History. . . . .	19
8. Recreation. . . . .	21
9. Alcohol Use . . . . .	22
10. Drug Use . . . . .	24
11. Criminal History . . . . .	26
12. Institutional Experience . . . . .	29
Discussion . . . . .	35
References . . . . .	39

## INTRODUCTION

One of the anomalies of correctional research is that rarely has the time been taken to document (cf. Griffiths & Rundle, 1976) the characteristics of the residents correctional systems are supposed to serve. In Canada, few published reports have included this type of information (Carlson 1973; Ciale, Landreville, Elie, Fattah, Perron & Shuster, 1968; Lambert and Madden, 1976). Without these types of data it is difficult for correctional administrators and programmers to plan in the best interests of their clients. As an example, if we are aware of certain social factors such as the degree of alcohol use or educational difficulty among our client population we can better develop the required programs and desired interface with other agencies. Moreover, as correctional research increases, baseline information is needed to assess the generalizability of results.

The majority of correctional research has focused on younger samples with less extensive criminal backgrounds where it is felt the potential impact of programming is greater. Guelph Correctional Centre was designated as a receiving institution for first incarcerates in Ontario during the period of the study thus the sample for this study was selected from that institution.

## METHOD

The sample consisted of 802 inmates selected from admissions to the Guelph Correctional Centre during a period from 1970 through 1972. While the intention was to focus on first incarcerates, nineteen inmates classified to Guelph, who had previously served reformatory or penitentiary time, were included in the sample.

Data presented in this report were collected on three instruments:

1. A Social History Interview conducted shortly after admission to Guelph, covering a wide variety of areas concerning the inmate's past.
2. A File Data Sheet filled in from information in institution files after each inmates release. This form included information on the behaviour and program involvement as well as prior criminal history for each inmate.
3. Recidivism Reports provided by the R.C.M.P., and Ministry files were used to collect information on criminal convictions and incarcerations during a two year period following each inmate's release.

The sample size varied with the source of information due to interview refusals, language barriers, files being incomplete and clerical error. For the most part, interview information was available on 741 (92%) of the sample, recidivism data on 773 (96%) of the sample and institutional data on the full sample of 802.

Data on recidivism were originally coded into an eight point index (Gendreau and Leipziger, 1977) but for the purposes of this report only two figures are given, defining recidivists as:

1. "reconvicted" - any one convicted of a criminal offence, returned to jail because of a parole violation or wanted on charges after a two year period from their release.
2. "reincarcerated" - anyone convicted on new charges which led to a period of incarceration during the first two years after their release. Parole violators with no new charges were not included in this group.

11-6



## FINDINGS

The data presented in this section consist of the response distributions on variables considered to be of particular interest to correctional programmers and administrators.

Four columns are presented for each variable category: the number in that category, the percentage this represents of the appropriate sample, the percentage of this group with any reconviction within two years of their release and the percentage reincarcerated within two years.

In some cases the categories are combined or eliminated before recidivism rates were calculated to provide larger, more stable samples. Where sample sizes were particularly small or variables were felt of little interest no recidivism figures are given.

Chi square ( $X^2$ ) statistics were calculated on a contingency table between the given variables and their reconviction and reincarceration rates. Where the results proved statistically significant ( $p < .05$ ) the  $X^2$  values are shown with significance levels indicated as follows; '\*' represents  $p < .05$ ; and '\*\*' represents  $p < .01$ . No statistical significance was indicated by (n.s.).

The findings are divided into sections according to the various facets of the inmates past. At the beginning of each section is a brief discussion highlighting the most significant points. These are intended only to point to what was felt to be of the most general interest and do not necessarily cover all the data in the section.

1. PERSONAL DEMOGRAPHY

The majority of the sample was under twenty. They were almost exclusively white, Canadian born and English speaking. The single variable most highly related to recidivism was age of the inmates, with those in the younger categories much more likely to have been reconvicted than the older group. It should be noted that as a first incarcerate sample the age of any inmate is indicative of how long he managed to avoid a serious enough conviction to result in incarceration since becoming legally an adult. It is interesting that those born in Canada had higher recidivism than others and those born in Ontario had higher recidivism than those born elsewhere in Canada.

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Age at Admission</u>				
16	103	12.8%	72.7	59.6
17	176	21.9	66.3	52.7
18	116	14.5	50.5	36.0
19	101	12.6	43.4	30.3
20	72	9.0	31.9	23.2
21-25	164	20.4	35.4	24.1
26-30	31	3.9	29.0	22.6
over 30	38	4.7	16.7	11.0
unknown	<u>1</u>	<u>0.1</u>	-	-
	802	100.0 <sup>1</sup>	(X <sup>2</sup> =56.91)**	(X <sup>2</sup> =72.40)**
<u>Racial Origin:</u>				
White	691	93.3%	49.2	36.6
Indian	33	4.5	65.6	56.3
other	<u>17</u>	<u>2.3</u>	43.8	37.5
	741	100.0	(n.s.)	(n.s.)
<u>Place of Birth:</u>				
Ontario	553	74.6%	54.6	41.1
Elsewhere in Canada	111	15.0	35.5	27.1
Western Europe	50	6.7	36.0	24.0
U.S.A.	11	1.5	18.2	18.2
Other	<u>16</u>	<u>2.2</u>	50.0	50.0
	741	100.0	(X <sup>2</sup> =21.98)**	(X <sup>2</sup> =13.97)**

(Elsewhere in Canada is broken down: Maritimes, 68: Quebec, 20; Prairies, 15: and British Columbia, 6)

1. Due to rounding errors the figures shown in the '%' column may not always add to 100.0%.

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>The citizenship status:</u>				
Canadian citizen	699	94.3%	51.5	38.7
Landed immigrant	16	2.2	21.4	21.4
Other	<u>26</u>	<u>3.5</u>	23.1	15.4
	741	100.0	( $\chi^2=12.70$ )**	( $\chi^2=7.40$ )*

The population of the place of birth  
for those born in Canada was:

200,000 or more	254	38.3%	56.1	41.4
50,000 to 199,999	149	22.4	51.4	41.8
10,000 to 49,999	106	16.0	49.5	39.6
less than 10,000	153	23.0	44.8	31.0
unknown	<u>2</u>	<u>0.3</u>	-	-
	664	100.0	(n.s.)	(n.s.)

First Language:

English	711	96.0%	50.4	37.9
French	20	2.7	42.1	31.6
Other	<u>10</u>	<u>1.3</u>	22.2	22.2
	741	100.0	(n.s.)	(n.s.)

Stated Religion

Protestant	394	53.2%	50.9	39.1
Catholic	269	36.3	50.6	37.8
Other	38	5.1	31.6	26.3
No response	<u>40</u>	<u>5.4</u>	-	-
	741	100.0	(n.s.)	(n.s.)

## 2. LIVING SITUATIONS AS A CHILD

The data in this section show a generally unstable pattern for many of the sample, with close to half experiencing at least one change in living situation during their childhood. While almost all had, at some point, lived with both parents, each of a large variety of other living situations was mentioned by significant portions of the sample.

Numerous problems existed in the homes that the inmates had grown up in, those involving finances or alcohol being the ones mentioned most often. Many also had siblings who had experienced some problem with the law.

In light of this troubled pattern, the portion (38.7%) receiving some form of community help seems very small. Of this group, many had had the help imposed on them by agencies such as probation or the police. Notably, those who had received help were more likely to recidivate than those who had not, especially where the help had been imposed. It should be pointed out that few reported strong negative feelings about their childhood living situations.

Those factors most associated with higher rates of recidivism were: siblings having legal problems, parents not getting along, alcohol problems in the home, parents on welfare, a negative attitude towards past living situations and having lived in a foster home. Surprisingly, those who mentioned living where there were drug problems had lower recidivism rates.

	<u>N</u>	<u>%</u>	<u>Percent</u> <u>Reconvicted</u>	<u>Percent</u> <u>Reincarcerated</u>
<u>Living situations subjects</u> <u>had experienced:</u>				
Living with both parents				
Yes	675	91.1%	48.7	36.8
No	<u>66</u>	<u>8.9</u>	63.9	45.9
	741	100.0	( $\chi^2=4.57$ )*	(n.s.)
Living with mother only				
Yes	214	28.9%	51.2	40.2
No	<u>527</u>	<u>71.1</u>	49.3	36.4
	741	100.0	(n.s.)	(n.s.)
Living with father only				
Yes	91	12.3%	52.9	36.8
No	<u>650</u>	<u>87.7</u>	49.4	37.6
	741	100.0	(n.s.)	(n.s.)
Living with relatives				
Yes	111	15.0%	54.1	41.3
No	<u>630</u>	<u>85.0</u>	49.1	36.9
	741	100.0	(n.s.)	(n.s.)

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
Living in a foster home:				
Yes	100	13.5%	63.8	47.9
No	<u>641</u>	<u>86.5</u>	47.7	36.0
	741	100.0	( $\chi^2=8.45$ )**	( $\chi^2=4.93$ )*

Living in a group home				
Yes	49	6.6%	47.8	39.1
No	<u>692</u>	<u>93.4</u>	50.0	37.4
	741	100.0	(n.s.)	(n.s.)

It should be noted that some inmates had lived in more than one situation. They mentioned:

One situation only	406	54.8%	48.2	35.7
Two situations	210	28.3	48.0	37.5
Three situations	89	12.0	60.5	43.0
Four or more situations	<u>36</u>	<u>4.9</u>	52.8	44.4
	741	100.0	(n.s.)	(n.s.)

Subjects were asked how they liked each of the situations they mentioned living in. Averages for those rating any situation were:

Like situations a great deal	298	40.9%	43.9	33.4
Liked somewhat	291	40.0	51.8	38.3
Liked a little	90	12.4	60.5	46.5
Didn't like at all	<u>49</u>	<u>6.7</u>	50.0	33.3
	728	100.0	( $\chi^2=8.32$ )*	( $\chi^2=32.74$ )**

Parents died before subject 15:

Neither	665	89.7%	50.5	37.6
One	68	9.2	42.9	36.5
Both	<u>8</u>	<u>1.1</u>	57.1	42.9
	741	100.0	(n.s.)	(n.s.)

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Number of siblings subject grew up with:</u>				
None	75	10.1%	56.5	40.6
One	114	15.4		
Two	123	16.6	47.4	36.8
Three	97	13.1	48.8	37.1
Four	72	9.7		
Five	80	10.8		
Six	50	6.7		
Seven to seventeen	<u>130</u>	<u>17.5</u>	53.2	38.1
	741	100.0	(n.s.)	(n.s.)

How subjects said their parents got along:

Very well	376	54.3%	42.5	31.1
Sometimes did, sometimes not	217	31.4	54.0	41.3
Not at all	<u>99</u>	<u>14.3</u>	65.6	51.0
	692	100.0	( $X^2=18.76$ )**	( $X^2=15.12$ )**

Parents ever separated:

Never	562	74.1%	47.9	34.8
Once	129	18.7	52.8	43.4
More than once	<u>50</u>	<u>7.2</u>	62.8	50.0
	741	100.0	(n.s.)	( $X^2=6.67$ )*

Ever lived where there were:

<u>Financial problems</u>				
Yes	163	22.0%	47.1	38.9
No	<u>578</u>	<u>78.0</u>	50.6	37.2
	741	100.0	(n.s.)	(n.s.)

<u>Alcohol problems</u>				
Yes	176	23.8%	60.0	47.6
No	<u>565</u>	<u>76.2</u>	46.7	33.8
	741	100.0	( $X^2=9.18$ )*	(n.s.)

<u>Drug problems</u>				
Yes	41	5.5%	32.5	30.0
No	<u>700</u>	<u>94.5</u>	50.8	38.0
	741	100.0	( $X^2=5.11$ )*	(n.s.)

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Legal problems</u>				
Yes	79	10.7%	54.7	46.7
No	<u>662</u>	<u>89.3</u>	49.3	36.5
	741	100.0	(n.s.)	(n.s.)
<u>Parents ever on welfare:</u>				
Yes	117	15.8%	58.4	47.8
No	<u>624</u>	<u>84.2</u>	48.3	35.6
	741	100.0	( $X^2=3.92$ )*	( $X^2=6.02$ )*
<u>Siblings ever in trouble with law:</u>				
Yes	250	33.7%	58.0	42.8
No	<u>491</u>	<u>66.3</u>	45.6	34.8
	741	100.0	( $X^2=9.82$ )**	( $X^2=4.35$ )*
<u>Siblings who had been incarcerated:</u>				
Yes	138	18.6%	62.9	49.5
No	<u>603</u>	<u>81.4</u>	47.9	35.5
	741	100.0	( $X^2=8.31$ )**	( $X^2=7.55$ )**
<u>Family ever receive help for personal problems:</u>				
Yes	287	38.7%	55.4	44.9
No	<u>454</u>	<u>61.3</u>	46.3	32.9
	741	100.0	( $X^2=5.59$ )*	( $X^2=10.49$ )**

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Source of help:</u>				
C.A.S.	52	18.1%	(of 287 receiving help, some answered more than once)	
Police or Probation/Parole	174	60.6		
Manpower, Workman's Comp.	17	5.9		
A.A.	7	2.4		
Social Work Agencies	47	16.4		
Church	13	4.5		
Medical people	25	8.7		

Reasons required:

Financial help	42	14.6%	(of 287 receiving help, some answered more than once)	
Help obtaining employment	21	7.3		
Medical help	11	3.8		
Psychological help, counselling	74	25.8		
Result of court, legal help	110	38.2		
Obtain place to live	22	7.7		

The help mentioned was usually:

Imposed on subject's family	143	49.9%	64.5	52.2
Found by subject on own	94	32.8	43.3	37.8
Offered or suggested	37	12.9	45.7	31.4
Other	14	4.9	44.4	33.3
	287	100.0	( $X^2=11.53$ )**	( $X^2=7.81$ )*



### 3. SITUATION AT TIME OF OFFENCE

Not surprisingly, given the age of the sample, a large majority of the sample were single. Almost 40% were still living with their parents or foster parents with many others living either alone or with friends.

While the data show the single group and those living with parents having the highest recidivism rates, this is to a large extent a function of age. Each of these groups was primarily made up of younger inmates who had higher recidivism regardless of who they had been living with.

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Marital status at time of offence:</u>				
Single	560	75.6%	53.8	41.2
Married	56	7.6	29.1	18.2
Common-law	89	12.0	42.4	30.6
Separated/divorced/widowed	<u>36</u>	<u>4.8</u>	40.0	28.7
	741	100.0	( $\chi^2=16.12$ )**	( $\chi^2=14.10$ )**
<u>Who living with at time of offence:</u>				
Parents or foster family	296	39.9%	56.7	41.5
Wife	92	12.4	41.6	27.2
Friends/communal situation	137	18.5	44.4	34.6
Alone	140	18.9	48.9	40.7
Relatives/inlaws	64	8.6	41.0	32.8
Other/unknown	<u>12</u>	<u>1.6</u>	-	-
	741	100.0	( $\chi^2=11.30$ )*	(n.s.)
<u>Subjects described the community they lived in at the time of offence as:</u>				
A city	488	65.9%	48.2	36.8
The country	169	22.8	53.8	39.4
Other/unknown	<u>84</u>	<u>11.3</u>	-	-
	741	100.0	(n.s.)	(n.s.)

#### 4. EDUCATIONAL AND WORK HISTORY OF PARENTS

For most of the sample, educational level of parents was limited to the primary grades, although the number whose fathers had post secondary education (10%) was surprisingly high. Almost all reported fathers who had worked all or most of the time and over half had mothers who worked at least some of the time. The socio-economic status of the families, as measured by the parents occupation was generally lower than the overall Ontario work force. Despite this, few reported that their fathers did not make "enough to get by".

A caution should accompany these data, as responses represent only the inmates perceptions of the situation. It is likely that what they describe as "getting by" or "living well" might vary considerably from the readers interpretation of the phrases.

Few of the variables in this section were related to subsequent recidivism.

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Fathers education</u>				
Less than grade eight	100	23.0%	51.6	39.6
Grade eight or nine	145	33.4	60.7	46.4
Grade ten or eleven	83	19.1	39.5	32.1
Grade twelve or thirteen	61	14.0	45.9	36.1
Some post secondary	<u>45</u>	<u>10.4</u>	34.9	25.6
	434	100.0	( $\chi^2=14.42$ )*	(n.s.)

(Due to large numbers in "unknown" category, data is shown only for those who answered.)

#### Mothers education

Less than grade eight	36	9.0%	38.2	35.3
Grade eight or nine	129	32.4	59.5	49.2
Grade ten or eleven	102	25.6	48.0	37.0
Grade twelve or thirteen	98	24.6	48.9	35.1
Some post secondary	<u>33</u>	<u>8.3</u>	48.4	32.3
	398	100.0	(n.s.)	(n.s.)

#### How often father worked:

All/most of time	627	90.9%	48.8	36.2
Off and on	53	7.7	58.0	46.0
Never	<u>10</u>	<u>1.5</u>	55.6	55.6
	690	100.0	(n.s.)	(n.s.)

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>How often mother worked:</u>				
All/most of time	181	25.5%	53.1	39.0
Off and on	236	33.2	50.2	37.1
Never	<u>294</u>	<u>41.4</u>	46.5	36.5
	711	100.0	(n.s.)	(n.s.)

The occupation of inmates parents were scored on a scale measuring socio-economic status (Blishen, 1967) with the following results:

Fathers occupation rating

Below thirty	179	26.5%	57.6	47.6
Thirty to thirty-nine	300	44.4	46.6	33.1
Forty to forty-nine	133	19.7	48.4	36.7
Fifty to fifty-nine	22	3.3	45.5	31.8
Sixty or above	<u>41</u>	<u>6.1</u>	34.2	24.1
(Higher scores indicated higher status)	675	100.0	(n.s.)	( $\chi^2=14.60$ )*

Mothers occupation rating

Below thirty	135	33.4%	59.4	45.1
Thirty to thirty-nine	165	40.8	48.1	32.4
Forty to forty-nine	58	14.4	43.6	36.4
Fifty to fifty-nine	35	8.7	47.1	35.3
Sixty or above	<u>11</u>	<u>2.7</u>	36.4	27.3
	404	100.0	(n.s.)	(n.s.)

For purposes of comparison the breakdown of the Ontario work force on the same scale from the 1961 census was:

Below thirty	26%
Thirty to thirty-nine	35
Forty to forty-nine	20
Fifty to fifty-nine	10
Sixty or above	9

As another indicator of job status the inmates were asked how good a living their father had made, with the following response:

Enough to live well	378	55.8%	47.1	35.2
Enough to get by	281	41.4	53.1	40.3
Not enough to get by	<u>19</u>	<u>2.8</u>	44.4	22.2
	678	100.0	(n.s.)	(n.s.)

5. EDUCATIONAL BACKGROUND

Few of the sample showed any indication of having been at all successful in their educational experience. Less than 20% had completed beyond grade ten and over 10% had not even completed elementary school. Large numbers mentioned problems getting along with teachers, finding school difficult and not having enjoyed school. While a small number had attempted some course since leaving, most did not follow these through to completion. Despite this lack of success, the types of courses taken should be of interest to those in charge of industrial programs. Auto mechanics, welding and machine shop were the courses mentioned most often.

Grade level and indications of behavioural problems in school were both highly related to recidivism. In the case of grade level, however, age accounted for at least some of the relationship. Many of the younger inmates with their high risk of recidivism were among those who had only completed the lower grades.

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Highest grade completed:</u>				
Less than 6	21	2.8%	52.7	40.3
6 or 7	57	7.7		
8	191	25.8		
9	218	29.4	55.9	43.2
10	135	18.2	53.9	40.6
11	42	5.7	26.8	17.5
12	46	6.2		
13	12	1.6		
Some university	8	1.1	25.0	12.5
Other/unknown	<u>11</u>	<u>1.5</u>	-	-
	741	100.0	( $X^2=27.36$ )**	( $X^2=22.90$ )**

Reasons given for leaving school:

Graduated	71	9.6%	(of interview sample, 741, some gave more than one answer)
Behaviour problems	125	16.9	
Lack of interest	195	26.3	
Too difficult	43	5.8	
Too lazy	19	2.6	
To meet other obligation	239	32.3	

Asked how they enjoyed school, subjects answered:

Not at all	225	30.4%	55.9	46.4
Some	285	38.5	49.3	35.6
Quite a bit	227	30.6	45.0	31.5
No response	<u>4</u>	<u>0.5</u>	-	-
	741	100.0	(n.s.)	( $X^2=10.99$ )**

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>How well in their view they got along with teachers:</u>				
Not well at all	126	17.0%	55.9	46.4
Some	282	38.1	49.3	35.6
Quite well	330	44.5	45.0	31.5
No response	<u>3</u>	<u>0.4</u>	-	-
	741	100.0	( $X^2=9.42$ )**	( $X^2=12.55$ )**

Ever expelled or suspended from school:

Yes	343	46.3%	58.0	42.8
No	<u>398</u>	<u>53.7</u>	42.8	32.9
	741	100.0	( $X^2=9.42$ )**	( $X^2=7.45$ )**

Did subject find school difficult:

Rarely	350	47.2%	47.6	34.1
Sometimes	271	36.6	51.9	39.0
Often	82	11.1	52.3	44.9
Always	34	4.6	-	-
Unsure/no response	<u>4</u>	<u>0.5</u>	-	-
	741	100.0	(n.s.)	(n.s.)

Taken course since leaving school:

Yes	174	23.5%	45.0	34.3
No	<u>567</u>	<u>76.5</u>	51.4	38.5
	741	100.0	(n.s.)	(n.s.)

Types of courses taken:

Auto mechanics	28	16.1%	(Of 174 who took courses some gave more than one answer)	
Welding	25	14.4		
Machine shop	18	10.3		
Carpentry	12	6.9		
Electronics	11	6.3		
Printing	9	5.2		
Other trade/tech.	33	19.0		
Clerical/sales	13	7.5		
Service	15	8.6		
Professional	7	4.0		
Other	3	1.7		

N      %

The results of courses taken were:

Completed course	51	29.3%
Stopped due to arrest	40	23.0
Fired or laid off relevant job	17	9.8
Left for other reason	<u>66</u>	<u>37.9</u>
	174	100.0

6. WORK EXPERIENCE

Work experience was for the most part extremely limited. Far less than half of those, not considering themselves students, were working when arrested. Of those who had worked, few (21.5%) had ever held a job over two years. The types of jobs held were almost all grouped at the lower end of the index used to measure their socio-economic level.

Recidivism was much lower among the small group showing some stability in their work histories. While this was, to some extent a function of age, experience in the work force appears to be a very critical factor.

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Time since last job:</u>				
Working when arrested	239	32.3%	40.3	28.3
Less than 3 months	153	20.6	50.7	38.5
3 to 6 Months	97	13.1	52.7	38.7
Over 6 months or unsure	121	16.3	52.1	41.0
Never worked (not student)	53	7.2	65.3	53.1
Never worked (student)	<u>78</u>	<u>10.5</u>	60.5	46.1
	741	100.0	( $X^2=17.23$ )**	( $X^2=16.03$ )**

Duration of longest job was:

Over 2 years	131	21.5%	26.0	15.7
6 months to 2 years	255	41.8	51.2	39.2
Less than 6 months	213	34.9	56.4	43.6
Unknown	<u>11</u>	<u>1.8</u>	-	-
	610	100.0	( $X^2=31.43$ )**	( $X^2=28.84$ )**

The following table shows how prior work experience is related to recidivism when age is controlled for. Each cell shows the percentage reconvicted and the total number in that cross classification.

RECIDIVISM BY WORK EXPERIENCE AND AGE

Age Group	Prior Work Experience				
	never worked (student)	never worked (not student)	worked prev.	working when arrested	overall
16 or 17	66.7% of 63	75.8% of 33	65.8% of 111	79.1% of 43	69.6% of 250
18 to 20	27.3% of 11	50.0% of 12	49.3% of 146	38.2% of 89	44.6% of 258
21 +	50.0% of 2	25.0% of 4	39.6% of 101	24.5% of 98	32.2% of 205
overall	60.5% of 76	65.3% of 49	51.7% of 358	40.3% of 230	49.9% of 713

Interestingly, while in the overall sample recidivism was lowest among those who were working when arrested, among the sixteen and seventeen year olds this group actually had the highest reconviction rate. A more predictable finding was that the high rate of recidivism among those listing themselves as students was largely a result of this group being mostly young. In the eighteen to twenty year old group, students actually had the lowest rate of reconviction.

The occupations of inmates were scored on Blishen's (1967) socio-economic index with the following results:

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Occupation rating:</u>				
Below thirty	298	49.2%	51.1	38.7
Thirty to thirty-nine	261	43.1	45.3	33.5
Forty to forty-nine	33	5.4	31.9	21.3
Fifty to fifty-nine	9	1.5		
Sixty or above	<u>5</u>	<u>0.8</u>		
	606	100.0	( $\chi^2=6.47$ )**	( $\chi^2=12.03$ )**

These occupation rating scores are considerably lower than those for an Ontario population as well as those of their parents, both shown in an earlier section.

Asked if they wanted a job following release: 501 (67.6%) of the sample said yes, 127 (17.1%) said definitely no while the remaining 113 were either undecided or would not say.

Two hundred and forty-one (32.5%) said they planned to return to school when released. This accounted for 117 (92.1%) of those definitely not planning to return to work and 71 (62.8%) of those unsure of their work plans.



7. MEDICAL HISTORY

Significant numbers of the sample (18.1%) had undergone some form of psychiatric treatment or had family members with histories of psychiatric problems. Over eight percent of the sample had attempted suicide at some point. Most of the sample had had at least one hospitalization but few reported excessive sickness in their childhood.

None of the variables in this section was significantly related to recidivism.

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Asked if they were sick much as children they responded:</u>				
A great deal	40	5.4%	47.4	39.5
Some	117	15.8	53.1	41.6
Very little/never	575	77.6	49.8	37.0
Don't remember/no response	<u>9</u>	<u>1.2</u>	-	-
	741	100.0	(n.s.)	(n.s.)
<u>Ever in hospital:</u>				
Never	192	25.9%	51.6	35.9
Once	250	33.7	53.3	41.3
Twice	105	14.2	46.3	35.7
Three or more times	189	25.5		
Don't remember	<u>5</u>	<u>0.7</u>	-	-
	741	100.0	(n.s.)	(n.s.)
<u>Ever had physical problems which affected work or school:</u>				
Yes	91	12.3%	42.0	29.5
No	<u>650</u>	<u>87.7</u>	51.0	38.7
	741	100.0	(n.s.)	(n.s.)
<u>On medication at time of offence:</u>				
Yes	85	11.5%	46.3	37.8
No	<u>656</u>	<u>88.5</u>	50.4	37.6
	741	100.0	(n.s.)	(n.s.)
<u>Prior psychiatric treatment:</u>				
None	533	71.9%	48.6	36.3
Out- patient only	117	15.8	54.0	40.7
In mental institution at least once	<u>91</u>	<u>12.3</u>	51.8	41.0
	741	100.0	(n.s.)	(n.s.)

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Psychiatric treatment of family members:</u>				
None mentioned	602	81.2%	50.2	36.9
As out-patients only	58	7.8	50.0	38.9
At least one had been in mental institution	<u>81</u>	<u>10.9</u>	47.4	41.0
	741	100.0	(n.s.)	(n.s.)
<u>Ever attempt suicide:</u>				
Yes	64	8.6%	55.7	44.3
No	<u>677</u>	<u>91.4</u>	49.2	36.9
	741	100.0	(n.s.)	(n.s.)

8. RECREATION

Inmates mentioned a wide range of activities when asked what they did in their spare time. Sports was the most popular followed by hobby type activities and more passive activities such as viewing television or reading. About half had been involved in at least one club organization.

None of the recreational data was related significantly to recidivism.

	<u>N</u>	<u>%</u>	<u>Percent</u> <u>Reconvicted</u>	<u>Percent</u> <u>Reincarcerated</u>
--	----------	----------	--------------------------------------	---

Subjects mentioned the following  
as things they do in their spare time:

Sports - as participant (fishing, pool, hockey..)	398	52.5%	(of interview sample, 741, some gave more than one answer)	
Entertainment - passive (T.V., radio, movies, reading sports as observer. . . .)	239	32.3		
Creative activities, Hobbies (painting, music, work on car, writing . . .)	240	32.4		
Travelling, Driving	70	9.4		
Drinking, Taking drugs	104	14.0		
Social activities (dancing, being with friends and relatives)	156	21.1		
Lounging, doing nothing	63	8.5		

Asked if they had belonged to any clubs  
or organizations, subjects answered:

Many	17	2.3%	} 45.5	34.0
Some	177	23.9		
One	174	23.5		
None	369	49.8		
No response	<u>4</u>	<u>0.5</u>	-	-
	741	100.0	(n.s.)	(n.s.)

The types of organizations subject  
mentioned belonging to were:

Sports clubs, teams	123	16.6%	(of interview sample, 741, some gave more than one answer.)	
Childhood clubs	117	15.8		
Motor cycle gangs, car club	52	7.0		
Special interest or activity group	56	7.6		
Social club	40	5.4		
Religious group	39	5.3		
Military group	35	4.7		

9. ALCOHOL USE

Of the group reporting regular alcohol use the vast majority had begun drinking prior to turning twenty-one. Over one third of those who ever drank began at fourteen or younger. Of those drinking around the time their offence occurred, a large number (27.8%) reported drinking as a way to ease tension or worries rather than for social or other reasons.

An unrealistically small number (3.2%) foresaw any problems with alcohol following release, given the numbers reporting heavy use.

It is the age at which drinking started rather than the existence of drinking which was related to recidivism.

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Ever used alcohol regularly</u>				
Yes	284	38.3%	48.5	35.3
No	453	61.2	51.0	39.2
No response	<u>4</u>	<u>0.5</u>	-	-
	741	100.0	(n.s.)	(n.s.)

Those drinking at all around the time of their offence were asked how much they were drinking :

A lot every day	58	28.3%	55.4	44.6
Some every day	61	29.8	41.4	32.8
Drinking on weekends/ occasionally	11	5.4	33.3	22.2
Going on periodic binges	<u>75</u>	<u>36.6</u>	52.8	31.9
	205	100.0	(n.s.)	(n.s.)

Asked why they drank, this same group answered:

To ease worries or tension	57	27.8%	47.3	32.7
Social reasons/a good time	65	31.7	50.0	33.9
For the taste	28	13.7	48.0	40.0
Other	<u>55</u>	<u>26.8</u>	50.9	39.6
	205	100.0	(n.s.)	(n.s.)

Drinking when their offence occurred:

Yes	147	19.8%	50.0	35.5
No	<u>594</u>	<u>80.2</u>	49.8	38.0
	741	100.0	(n.s.)	(n.s.)

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Age began drinking:</u>				
14 or younger	103	36.3%	66.0	50.0
15 to 17	139	48.9	40.2	27.3
18 to 20	31	10.9	31.6	23.7
21 or over	9	3.2		
unknown	<u>2</u>	<u>0.7</u>		
	284	200.0	( $\chi^2=20.30$ )**	( $\chi^2=15.45$ )**

Ever stopped drinking for extended period:

Yes	165	58.1%	48.1	35.4
No	<u>119</u>	<u>41.9</u>	49.1	34.5
	284	100.0	(n.s.)	(n.s.)

Did subject start again (of those who stopped):

No	56	39.9%	37.3	25.5
Yes	<u>109</u>	<u>60.1</u>	55.3	41.7
	165	100.0	( $\chi^2=4.46$ )*	( $\chi^2=3.90$ )*

Reasons given most often for stopping use of alcohol were:

No longer liked alcohol	60	36.4%	(of 165 who had stopped, some gave more than one answer)	
Medical reasons/addiction	27	16.4		
Legal trouble	17	10.3		
Social pressure	10	6.1		
Lack of funds	9	5.5		

Asked if they anticipated some problems keeping away from alcohol after their release 24 (3.2%) of the total sample said yes and an additional 18 (2.4%) were unsure.

10. DRUG USE

The number reporting drug use was similar to that reporting alcohol use. As with alcohol, most of those using drugs began doing so at an early age. More mentioned physical effects as reasons for using drugs than was the case with alcohol. Amphetamines were the most commonly used drugs followed by L.S.D., cannabis and opiates.

Again, it was the age of onset which was most highly related to recidivism. Use of any particular drug was not related to recidivism and, in fact, cannabis use was related to lower reconviction rates.

Given the quickly changing trends in drug use there is question as to how applicable these data may be to the situation today.

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>	
<u>Ever use drugs regularly:</u>					
Yes	284	38.2%	50.4	37.6	
No	<u>457</u>	<u>61.7</u>	49.9	37.8	
	741	100.0	(n.s.)	(n.s.)	
<u>Using drugs at time of offence:</u>					
Yes	243	32.8%	52.1	40.2	
No	<u>498</u>	<u>67.5</u>	48.8	36.3	
	741	100.0	(n.s.)	(n.s.)	
<u>The reasons given most often for using drugs were:</u>					
Pleasure, curiosity, kicks	140	57.6%	(of those using around offence, 243, some gave more than one answer))		
Escape reality, realize self	62	25.5			
Lack self control, physical need	41	16.9			
Peer influence	16	6.6			
<u>Taking drugs when the offence occurred:</u>					
Yes	167	22.5%	52.2	41.0	
No	<u>574</u>	<u>77.5</u>	49.2	36.5	
	741	100.0	(n.s.)	(n.s.)	
<u>The drugs being used were:</u>					
Opiates	Yes	55	7.4%	56.9	45.1
	No	<u>686</u>	<u>92.6</u>	49.3	37.1
	741	100.0	(n.s.)	(n.s.)	
Amphetamines	Yes	150	20.2%	56.9	45.1
	No	<u>591</u>	<u>79.8</u>	48.1	35.6
	741	100.0	(n.s.)	(n.s.)	

		<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Drugs being used: (con't)</u>					
LSD	Yes	108	14.2%	51.5	38.8
	No	<u>633</u>	<u>85.8</u>	49.6	37.3
		741	100.0	(n.s.)	(n.s.)
Cannabis	Yes	103	13.9%	37.4	28.3
	No	<u>638</u>	<u>86.1</u>	51.9	39.0
		741	100.0	( $\chi^2=6.60$ )*	(n.s.)

Age began using drugs:

14 or younger	54	19.0%	57.7	44.2	
15 to 17	161	56.7	55.5	41.9	
18 to 20	52	18.2	33.3	22.7	
21 and over	<u>17</u>	<u>6.0</u>			
		284	100.0	( $\chi^2=10.39$ )**	( $\chi^2=8.42$ )*

Ever stop using drugs for extended period:

Yes	144	50.7%	42.6	32.6	
No	<u>140</u>	<u>49.3</u>	59.3	43.7	
		284	100.0	( $\chi^2=7.70$ )**	(n.s.)

Start using again:

Yes	70	48.6%	44.9	39.1	
No	<u>74</u>	<u>51.4</u>	40.3	26.4	
		144	100.0	(n.s.)	(n.s.)

The reasons given most often for stopping were:

Emotional problems	22	15.3%	(of 144, some gave more than one response)	
Drugs stopped providing pleasure	25	17.4		
Fear of addiction, going downhill	38	26.4		
Health problems	17	11.8		
Influence of friends	17	11.8		
Financial reasons	11	7.6		
Incarceration	15	10.4		

Asked if they expected difficulty staying off drugs following their release 39 (5.3%) of the subjects said yes, and an additional 29 (3.9%) were unsure.

11. CRIMINAL HISTORY

While we are dealing with a sample of first incarcerates, it is important to recognize that, with few exceptions, they are far from being first time offenders. Over half had at least one prior adult conviction and many of those with no adult convictions had court appearances as juveniles. Overall only 188 (24.5%) of the sample had no evidence of prior contact with the legal process. The existence of such prior contact was strongly related to higher recidivism, especially where contacts began at an early age.

As well as their criminal experience, most of the sample had undergone some form of correctional program such as probation or training school. Those who had experienced either of these were more likely to recidivate than those who had not.

Property offences were by far the most common type of charges leading to incarceration with over three quarters of the sample having at least one charge in this group. Those convicted of property offences or crime against public order were more likely to recidivate than those who were not, while drug offenders were the least likely to recidivate.

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Age first court experience:</u>				
Fifteen or less	339	45.8%	70.1	55.0
Sixteen, seventeen	227	30.6	37.7	27.4
Eighteen - twenty	92	12.5	30.8	19.8
Twenty-one +	79	10.7	26.6	17.7
Unknown	<u>4</u>	<u>0.5</u>		
	741	100.0	( $X^2=95.88$ )**	( $X^2=76.70$ )**

<u>Ever been in training school:</u>				
More than once	34	4.6%		
Once	130	17.5	76.4	64.2
No	<u>577</u>	<u>77.9</u>	42.9	30.6
	741	100.0	( $X^2=52.41$ )**	( $X^2=56.57$ )**

<u>Total time in training school:</u>				
One year or less	76	47.5%	74.3	60.0
One to two years	44	27.5	81.8	65.9
Over two years	<u>40</u>	<u>25.0</u>	71.4	68.6
	160	100.0	(n.s.)	(n.s.)

<u>Previous adult convictions:</u>				
None	353	46.0%	45.8	34.8
One	171	22.3	45.4	30.1
Two	90	11.7	53.5	45.3
Three-five	112	14.6	63.5	49.0
Six or more	<u>42</u>	<u>5.5</u>	73.2	56.1
	768	100.0	( $X^2=20.47$ )**	( $X^2=18.00$ )**



		<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Ever had the following disposition:</u>					
Fine	Yes	187	24.3%	46.7	31.1
	No	<u>581</u>	<u>75.7</u>	49.4	38.3
		768	100.0	(n.s.)	(n.s.)
Probation	Yes	415	54.0%	58.6	45.9
	No	<u>353</u>	<u>46.0</u>	38.1	26.5
		768	100.0	( $X^2=31.48$ )**	( $X^2=30.51$ )**
Jail term	Yes	169	22.0%	55.3	42.2
	No	<u>599</u>	<u>78.0</u>	47.1	35.1
		768	100.0	(n.s.)	(n.s.)
Reformatory	Yes	15	2.0%	85.7	64.3
	No	<u>753</u>	<u>98.0</u>	48.1	36.1
		768	100.0	( $X^2=6.36$ )*	(n.s.)
Penitentiary term	Yes	4	0.5%	50.0	25.0
	No	<u>764</u>	<u>99.5</u>	48.8	36.7
		768	100.0	(n.s.)	(n.s.)
<u>Types of crimes leading to current incarcerations:</u>					
Crimes against person					
	Yes	59	7.4%	56.4	32.1
	No	<u>743</u>	<u>92.6</u>	44.0	37.0
		802	100.0	(n.s.)	(n.s.)
Crimes against property					
	Yes	610	76.1%	53.7	41.2
	No	<u>192</u>	<u>23.9</u>	33.5	22.3
		802	100.0	( $X^2=23.50$ )**	( $X^2=20.99$ )**
Crimes against public morals					
	Yes	14	1.7%	30.8	30.8
	No	<u>798</u>	<u>98.3</u>	49.1	36.7
		802	100.0	(n.s.)	(n.s.)

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
Crimes against public order and peace				
Yes	108	13.5%	56.2	45.7
No	<u>694</u>	<u>86.5</u>	47.6	35.2
	802	100.0	(n.s.)	( $\chi^2=3.90$ )*
Liquor offences				
Yes	26	3.2%	56.5	30.4
No	<u>776</u>	<u>96.8</u>	48.5	36.8
	802	100.0	(n.s.)	(n.s.)
Drug offences				
Yes	96	12.0%	24.5	13.8
No	<u>706</u>	<u>88.0</u>	52.1	39.8
	802	100.0	( $\chi^2=24.20$ )**	( $\chi^2=22.83$ )**

12. INSTITUTIONAL EXPERIENCE

Probably the most useful finding in this section is the high relationship between institutional behaviour and subsequent recidivism. Even with the rather rough indicators employed in this study such as number of misconducts, remission earned and incentive allowance level obtained, we get good predictive ability. Of particular interest is the high relationship between recidivism and misconducts even when only the first three months of incarceration are examined. These data point to the strong potential of a more structured method of rating behaviour.

There were numerous changes in work and bed assignment for many of the inmates during these stays. Those with many changes were more likely to recidivate than those in more stable situations but it is felt this is mainly a further reflection of poor institutional behaviour.

The data on programs which the inmates were involved in show a very limited program in existence at the institution during the period of the study. Far fewer inmates received training, especially trade or vocational training, than had expressed an interest in it when interviewed early in their incarceration. This lack of training is particularly distressing in light of the young age and lack of prior education of most of the sample.

It should be pointed out that the program at Guelph may have changed considerably over the period since this study was conducted. In fact, it now serves a recidivist population and is much more involved in temporary absence type programs. Nevertheless, the picture presented here should be of use in describing the experience of this particular sample and may not be too unlike the situation in other institutions today.

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Total time incarcerated this incarceration:</u>				
Less than 3 months	152	19.0%	41.9	29.1
3 - 6 months	298	37.2	49.7	37.4
6 - 9 months	189	23.6	52.0	38.7
9 months to 1 year	63	7.9	54.1	41.0
12 - 15 months	36	4.5	59.6	53.2
15 - 18 months	14	1.7		
18 -21 months	3	0.4		
21 months to 2 years	4	0.5		
Over 2 years	<u>42</u>	<u>5.2</u>	27.0	21.6
	801	100.0	( $\chi^2=13.92$ )*	( $\chi^2=13.73$ )*

While the entire sample spent part of their sentence in Guelph C.C. many were transferred elsewhere during their period of incarceration. The institution at which the subject spent the majority of their sentence was:

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
Guelph C.C.	501	62.5%	50.7	38.8
Brampton A.T.C.	147	18.3	48.6	34.9
Burtch C.C. or A.T.C.	45	5.6	43.2	29.5
A.G.B. Clinic, Mimico	24	3.0	41.8	31.6
A local jail	12	1.4		
Millbrook C.C.	9	1.1		
Camp Oliver	8	1.0		
Burwash Industrial Farm	4	0.5		
Ontario Hospital	3	0.4		
Other	40	5.0		
Less than $\frac{1}{2}$ sentence spent at any one institution	<u>9</u>	<u>1.1</u>		
	802	100.0	(n.s.)	(n.s.)

Number of institutional transfers:

None	249	31.0%	46.9	32.9
One	363	45.3	47.0	36.8
Two	145	18.1	54.7	41.6
More than two	<u>45</u>	<u>5.6</u>	54.8	40.5
	802	100.0	(n.s.)	(n.s.)

Number of changes in bed assignment:

None	291	36.3%	46.9	37.1
One	118	14.7	44.8	23.3
Two	91	11.3	42.4	30.8
Three	88	11.0	58.7	47.1
Four	53	6.6		
Five	30	3.7		
Six or more	<u>131</u>	<u>16.3</u>		
	802	100.0	( $X^2=11.99$ )**	( $X^2=21.47$ )**

Number of changes in work settings:

None	520	64.8%	45.2	33.3
One	150	18.7	51.4	35.1
Two	61	7.6	56.7	50.5
Three	41	5.1		
Four or more	<u>30</u>	<u>3.7</u>		
	802	100.0	( $X^2=10.82$ )**	( $X^2=14.14$ )**

Files showed that 262 (32.7%) of the sample had taken some form of educational course while incarcerated. The types of courses taken were:

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
Academic only	51	6.4%	40.0	28.0
Trade training only	63	7.9	49.2	32.8
Both	148	18.5	50.3	38.6
None	<u>540</u>	<u>67.3</u>	47.9	35.4
	802	100.0	(n.s.)	(n.s.)

In the interview subjects were asked what types of training they wanted to receive while incarcerated. The following were mentioned:

Academic upgrading	150	20.2%	(of 741, some gave more than one response)
Vocational or trades	349	47.1	
Something to help on streets	18	2.4	

Medical treatment received while incarcerated:

None	326	43.0%	46.7	35.6
Minor only	281	37.0	53.4	39.2
Major (at institution)	70	9.2	49.0	38.8
Major (outside institution)	<u>83</u>	<u>10.9</u>		
	760	100.0	(n.s.)	(n.s.)

(complete data was not available on 42 subjects)

At some point during their incarceration 76 (9.5%) of the sample appeared in court on further charges. Of these 57 received some further time and 18 some lesser sentence. One had no further disposition.

Fifty-nine (7.4%) filed appeals during their sentence, with these results:

Conviction quashed	2	3.4%
Sentence reduced	15	25.4
No change	<u>42</u>	<u>71.2</u>
	59	100.0

Times applied for temporary leave of absence:

None	464	57.9%	47.5	35.9
One	173	21.6	50.5	37.5
2 or 3	107	13.3		
4 to 14	<u>58</u>	<u>7.2</u>		
	802	100.0	(n.s.)	(n.s.)

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Times out on temporary leaves of absence:</u>				
None	596	74.3%	50.5	38.9
One	123	15.3	43.7	29.9
2 or 3	59	7.4		
4 to 14	<u>24</u>	<u>3.0</u>		
	802	100.0	(n.s.)	( $\chi^2=5.05$ )*

Ever involved in:

Work release	15	1.9%	28.6	21.4
Education release	34	4.2	54.8	32.3
Neither	<u>753</u>	<u>93.9</u>	48.9	37.2
	802	100.0	(n.s.)	(n.s.)

Results of reviews of rate of incentive  
allowance inmates received:

Allowance upgraded each review	201	39.0%	38.9	27.3
Upgraded at least half reviews, never downgraded	96	18.6	48.9	34.0
Upgraded at less than half reviews, never downgraded	112	21.7	54.1	40.4
Allowance downgraded at least once	<u>107</u>	<u>20.7</u>	62.1	47.6
	516	100.0	( $\chi^2=16.35$ )**	( $\chi^2=13.62$ )**

As well as statutory remission, based on length of sentence, each inmate has a certain potential number of days he can earn for good behaviour. Of this total they earned:

All	646	80.5%	45.6	32.9
All but one day	61	7.6	60.0	50.0
All but two or three days	55	6.9	57.4	46.3
More than three days not earned	<u>40</u>	<u>5.0</u>	75.0	68.8
	802	100.0	( $\chi^2=15.95$ )**	( $\chi^2=23.87$ ***)

Number of misconduct reports filed during  
first three months of incarceration

None	551	68.7%	43.6	30.5
One	124	15.5	58.0	47.9
Two or three	80	10.0	59.2	46.1
Four or five	26	3.2	60.9	56.5
Six or more	21	2.6	80.0	75.0
	802	100.0	( $\chi^2=22.35$ )**	( $\chi^2=34.78$ )**

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Total misconducts filed during entire incarceration:</u>				
None	480	59.9%	42.9	29.9
One	119	14.8	55.6	45.3
Two or three	96	12.0	60.2	43.0
Four or five	41	5.1	44.7	36.8
Six or more	<u>66</u>	<u>8.2</u>	66.7	63.2
	802	100.0	( $X^2=20.93$ )**	( $X^2=31.80$ )**

The types of misconducts subjects  
were charged with were:

Neglect or refuse to work	114	14.2%	(of total sample, 802, some had more than one type)	
Smuggling or contraband	58	7.2		
Foul or profane language	67	8.4		
Fighting	103	12.8		
Cause or conspire to cause disturbance	41	5.1		
In unauthorized place/attempt escape	66	8.2		
Break rules in institution/ disobey order	215	26.8		
Attempt indecent act	3	0.4		
Destroy property	37	4.6		

Subjects were given the following dispositions  
as a result of misconducts:

Loss of privileges	109	13.6%	(of total sample, 802, some had more than one)	
Indefinite detention	46	5.7		
Detention on special diet loss of statutory remission	57	7.1		
Fail to earn remission	1	0.1		
Warning	138	17.2		
Incentive allowance downgraded	48	6.0		
Forfeit incentive allowance	183	22.8		

Ever applied for national parole:

Yes - granted	123	15.3%	40.2	26.2
Yes - not granted	250	31.2	50.6	36.3
No	<u>429</u>	<u>53.5</u>	50.2	39.8
	802	100.0	(n.s.)	( $X^2=7.55$ )*

	<u>N</u>	<u>%</u>	<u>Percent Reconvicted</u>	<u>Percent Reincarcerated</u>
<u>Ever applied for Ontario parole:</u>				
Yes - granted - 1st application	193	24.1%	43.9	30.7
Yes - granted - 2nd application	92	11.5	58.2	41.8
Yes - not granted	80	10.0	61.6	56.2
No	<u>437</u>	<u>54.5</u>	46.7	34.8
	802	100.0	( $\chi^2=10.64$ )*	( $\chi^2=16.54$ )**



## DISCUSSION

In discussing the implications of the data it is important to note that, even among a sample of first incarcerates, very few (24.5%) had no prior contact with the legal process. In fact, almost half of the sample (45%) had contact with the legal system before the age of 16. The data generated from this sample have several important implications for correctional programming for this type of sample. We will discuss these issues in order of importance for decision-making relevant to programming for correctional institutions.

### The Lack of Community Social Services

Traditionally, the view has been that family conditions supporting an inadequate social development have promoted delinquency (Hunt & Hardt, 1965; Warren, 1969). Many families with these characteristics have had limited economic opportunities and been denied access to legitimate means of obtaining culturally acclaimed goals (Merton, 1949). In addition, it has been predicted that delinquent behaviour is reinforced if an individual associates with people who have had criminal associations (Sutherland & Cressy, 1966). The normative data in this study supports these types of views.

To illustrate this point the socio-economic status of the respondents in this study was low when compared to Ontario as a whole on an index of job status. Fifty-six percent of their fathers had grade 9 or less education and 44% of their families "made enough to get by". Sixty-six percent of the respondents had grade 9 or less education and adjustment problems in school were frequent. Work histories were very irregular. Twenty-eight percent of the sample had received psychiatric referrals, 38% used alcohol and drugs regularly, and in most of these cases chemical abuse started before 17 years of age. Forty percent had siblings who had trouble with the law. Forty-six percent had been to court before 15 years of age, 23% had been to training schools and 54% had previous adult convictions.

The data in this study point to a very striking irony. Commonly, when the adequacy of programming in the criminal justice system has been subjected to review, it has been the correctional system that has borne the brunt of criticism (e.g., Tittle, 1974). No doubt some of the past criticisms in this area have been justified, but less often has the adequacy of social services within the community been subject to scrutiny. Some of the current fashionable thinking in corrections, be it radical nonintervention or advocacy (Berger, Crowley, Gold, Gray & Arnold, 1975; Dell'Apa, Adams, Jorgenson & Sigurdson, 1976; Schur, 1973), is that the delinquents should be left alone wherever possible and "treatment" institutions as they are known should be abolished. Presumably, the orientation should be towards "voluntary" treatment where the client is directed towards using available community resources. While there may be some exceptions in the community, Andrews (1977) has pointed out that it is incredibly naive to assume such services exist or, moreover, that the expertise exists in community services to provide the type of service from which the offender and his family may benefit.

The data from this study speak directly to the question of whether, in fact, community services do exist. Consider the following statistics. The normative data, as reviewed above, clearly indicate that many of the offenders and their families could have benefited from social services of some sort. However, only 39% of the families of respondents in this study received help for personal problems. Of this 39%, 33% found the resources on their own, but, in half of these cases, when help did reach the subjects' families it was imposed upon them. In such cases the reconviction rates were 21% higher than for subjects from families which were able to find help on their own, or in those cases where help was suggested to them.

Even more remarkable are the data which point to where the help came from. By and large, in the great majority of cases it came from the legal establishment. That is, 61% of those whose families had received help list probation or parole or the police as one of the sources of help. Traditional social service agencies such as Children's Aid Society or social work agencies were mentioned by just 34% of those receiving help.

While the study was conducted in the early 1970's it is not likely the despairing picture above regarding community services is unrealistic today. In a series of studies conducted by the Ontario Ministry of Correctional Services (cf. Polonoski, 1976), it was found that there was a marked inconsistency and arbitrariness in the dispensation of community assessment, with too few of the offenders' families that had definite dysfunctions receiving family support or aid. Also, it should be noted that the samples examined in these studies consisted of some of the most severe problem cases, which would be the ones most likely to force their attention upon the existing social services in the community. Moreover, Sone (1976) found that upon release from community resource centres of the Ontario Ministry of Correctional Services inmates made very little use of community facilities.

Indeed, the "catch all" phrase that is popularly bandied about today that "nothing works" (cf. Martinson, 1974) may be rephrased "not much has worked because nothing much has been tried". Indeed, until meaningful and efficient program linkages between correctional and community agencies evolve, service delivery for the offender will continue to resemble the situation described by some of the data in this study.

#### Programming in Correctional Institutions

Several issues related to programming in correctional agencies were highlighted by the data. These were academic and vocational training, alcohol and drug treatment, the "medical model" of service delivery, institutional adjustment, parole decision-making and length of institutional stay.

The data from this study pointed to the lack of some types of services at Guelph Correctional Centre during the time the study was conducted. It is our view that Guelph Correctional Centre, at that time, was and still is quite typical of many large correctional centres both in the Federal system and within other provinces in terms of social services. It should be noted, in all fairness to the institution, that its role has changed during the last several years. However, it is worth noting the following facts. Forty-seven percent of the sample requested, during the interview, vocational or trades training, 20% wanted academic upgrading and 2% wanted life skills. In terms of services actually received, 67% of the total sample did not take part in any of these services while incarcerated. Given the limited vocational and educational backgrounds of the sample, it was unfortunate that more did not receive training in these areas.

The data also speak to programming in the alcohol and drug area. Alcohol and drug abuse are endemic to correctional samples and in many cases contributes to the offenders' problems with the law, (Macdonald & Bygott, 1977). However, the offenders' perceptions of the problem areas, as evidenced by the data in this study, are far different. Less than 20% reported drinking when the offence occurred and just 3% anticipated a problem with alcohol in the future. This data contrasts with the fact that 38% of the sample reported drinking regularly, many of these did so before the age of 15, and it was these who had high recidivism rates. The pattern was similar for drug offenders. The obvious problem facing programmers is the very difficult one of altering the offenders' perception of problem areas prior to even initiating actual treatment procedures. It is worth noting that abusers of alcohol and hard drugs had similar reconviction rates except for those arrested for cannabis use. Reconviction rates for cannabis users were considerably lower. This reflects the fact that when the study was run in 1970-72, Guelph C.C. received quite a few individuals arrested for minor drug offences. Some of these offenders had previously little contact with the law, more education, and came from predominately middle-class backgrounds.

The data provide some inferences for the types of services provided within correctional settings. The "medical model" conception of delinquency (cf. Balch, 1975) assumes, in part, that psychiatric treatment is justified, as such treatment is related to subsequent recidivism. Often offenders with psychiatric histories become labelled, which affects how they are institutionally managed, sometimes to their detriment (Desroches, 1973; Nassi, 1975). The data we generated demonstrated no relationship between medical/psychiatric history and subsequent recidivism. Thus, the model has definite limitations regarding one type of outcome, i.e., recidivism. We are not denying, however, that offenders with some psychological problems need psychiatric care in order to cope with institutional life and for planning appropriate community referrals upon release.

Intuitively, one would expect that institutional maladjustment e.g., refusing to work, fighting, destroying property, would be predictive of recidivism. While Carlson (1973) did not report any such relationship in a study carried out at Guelph C.C. several years prior to this study, our investigation found a strong relationship between institutional misconducts and recidivism. This relationship, interestingly, was most pronounced (when examining misconduct) in the first three months of the offenders' incarceration. From the point of view of institutional management, one suggestion would be to pay particular attention from a custodial and treatment standpoint to intake behaviour which may be as predictive of community adjustment as pre-release factors.

Decisions on parole are based in part on institutional information. Unlike Carlson (1973) we found parole decisions for offenders at Guelph C.C. to be predictive of recidivism. Of the two types of parole decisions, Ontario and National, the former predicted recidivism the best. Those inmates granted Ontario parole had significantly lower recidivism rates.

Finally, the view that prisons are schools of crime, in that criminal values are reinforced (cf. Clemmer, 1958), was not supported to the extent that increased time in prison was not correlated with increased recidivism for first incarcerates. Some of the inmates incarcerated longest at Guelph had some of the lower recidivism rates. This group was, for the most part, older than the rest of the sample which may partially account for the lower rate of recidivism. Furthermore, the total amount of time spent in training schools by the respondents in the study was found not to be related to subsequent recidivism. Similarly, Madden, (1976) and Madden and Lambert (1974) did not find long incarcerations related to higher recidivism in samples of female first incarcerates and training school wards in Ontario.

#### Systems Information Development

To the extent that correctional services programming management is concerned with one of the outcome variables of their system, i.e., recidivism, the information in this study can lead to better systems information development. Certain key questions from the present survey were better predictors of recidivism than others. Thus, a concise questionnaire could be developed from the present study that would focus on recidivism. This type of data would aid social service and management staff within the institution as well as parole/aftercare programmes.

#### Recidivism Comparisons - Canada

The present study is the most extensive carried out to date, in terms of number of variables examined. Three of the four previous studies were post-hoc and relied on file data alone. Two of the studies (Blum & Chagnon, 1967; Carlson, 1973), both carried out at Guelph C.C., examined less than a dozen variables and the adequacy of the analysis of Carlson's paper has been criticized (Martin, 1977). One of the reports centered on Quebec inmates (Ciale et al., 1968). Grygier, Blum and Probeski (1971) have demonstrated that generalizations from Quebec samples to other provinces in prediction studies cannot be guaranteed. The remaining Canadian study, similar in methodology to the present one (Lambert & Madden, 1976), was based on female offenders.

However, despite these disparities and the fact that the above studies have few independent variables in common, all the studies implicate age and previous criminal record as potent predictors of recidivism. This report as well as Lambert & Madden's (1976) confirm that "family problems", drug use at an early age, education and institutional adjustment predict recidivism.

Martin (1977) has questioned (p. 202) Carlson's view that previous criminal history was a more important factor in recidivism than age. Granted previous criminal history was a potent factor in our study, however, we found age to be as, or more, significant. Age itself was highly related to recidivism and, in addition, partially accounted for other variables having a significant relationship with recidivism, i.e., living situation at the time of offence, education, employment history, drug use.

### Comparison with Other Jurisdictions

To give perspective to the data presented, we have attempted to make comparisons with recidivism data gathered in other countries. Most of the other data come from the United States and deal primarily with juveniles.

Consistent with this study, age and previous criminal history have been found to be strongly related to recidivism in studies done elsewhere (e.g., Babst, Inciardi & Jaman, 1971; Babst, Koval & Neithercutt, 1972; Bapp & Blazer, 1970; Buikhuisen & Hoekstra, 1974; Cartwright, Kelling, Taylor & Cameron, 1972; Ganzer & Sarason, 1973; Gough, Wenk & Rozyko, 1965; Mandel, Collins, Moran, Barron, Gelbmann, Godbois & Kaminstein, 1965; O'Donnell & Stanley, 1974; Roberts, Erikson, Riddle & Bacon, 1974; Sampson, 1974; Unkovic & Ducsay, 1969).

While there is some disagreement (Roberts et al., 1974; Unkovic & Ducsay, 1969), most studies report that a variety of family situation variables reflecting inadequate/inappropriate socialization are associated with recidivism (e.g., Bapp & Blazer, 1970; Briggs, Wirt & Jackson, 1961; Buikhuisen & Hoekstra, 1974; Cowden & Pacht, 1967; Cartwright et al., 1972; Ganzer & Sarason, 1973; Griffiths & Rundle, 1976; Maskins & Brookins, 1974; Sampson, 1974; Virkkunen, 1976). This study confirmed these latter studies' results.

As with Cowden & Pacht (1967), Cymbalisky, Schuck & Dubeck (1975) and Mandel et al., (1965), institutional behaviour was found to be related to recidivism.

Four of the studies (Babst et al. 1971, 1972; Guze, 1964; Platt & Labate 1976) have reported alcohol and drug use of the offender to be associated with recidivism. The Guelph C.C. sample confirmed this finding in that use at an early age predicted recidivism but other factors in their medical history i.e., hospitalizations, psychiatric problems, were not related to recidivism. In this study, education level was related to recidivism which has been the case elsewhere (Babst et al., 1971; Bapp & Blazer, 1970).

Finally, poor employment history was related to recidivism in this study which was similar to other reports (Cartwright, et al., 1972; O'Donnell & Stanley, 1974; Platt & Labate, 1976).

REFERENCES

- Andrews, D.A. The dimensions of correctional counselling and of supervisory process in probation & parole: IV problem solving & environmental facilitation. Ottawa, Ontario: Canadian Volunteers in Corrections Module, May, 1977.
- Babst, D.V., Inciardi, J.A., & Jaman, D.R. The uses of configural analysis in parole prediction research. Canadian Journal of Criminology & Corrections, 1971, 13, 200-208.
- Babst, D.V., Koval, M., & Neithercutt, M.G. Relationship of time served to parole outcome for classifications of burglars; Based on males paroled from fifty jurisdictions in 1968 & 1969. Journal of Research in Crime & Delinquency, 1972, 9, 99-116.
- Balch, R.W. The medical model of delinquency: Theoretical, practical & ethical implications. Crime & Delinquency, 1975, 21, 116-129.
- Bapp, F.B. & Blazer, J.A. Social characteristics of recidivist & non-recidivist male delinquents. Psychology, 1970, 7, 67-81.
- Berger, R.J., Crowley, J.E., Gold, M., Gray, J. & Arnold, M.S. Experiment in a juvenile court: A study of a program of volunteers working with juvenile probationers. Ann Arbor, Michigan: Institute for Social Research, 1975.
- Blishen, B.R. A socio-economic index for occupations in Canada. Canadian review of Sociology & Anthropology, 1967, 23, 168-170.
- Blum, F.J. & Chagnon, M. Some parameters of persistent criminal behavior. Journal of Clinical Psychology, 1967, 23, 168-170.
- Briggs, P.F., Wirt, R.D., & Johnson, R. An application of prediction tables to the study of delinquency. Journal of Consulting Psychology, 1961, 24, 46-50.
- Buikhuisen, W. & Hoekstra, H.A. Factors related to recidivism. British Journal of Criminology, 1974, 14, 62-69.
- Carlson, K.A. Some characteristics of recidivists in an Ontario institution for adult male first incarcerates. Canadian Journal of Criminology & Corrections, 1973, 15, 1-15.
- Cartwright, D.S., Kelling, G.W., Taylor, G.P. & Cameron, C.B., Measuring and predicting juvenile probation outcomes. An exploratory study. Criminology, 1972, 10, 143-160.
- Ciale, J., Landreville, P., Elie, D., Fattah, E., Perron, C., & Shuster, S. Information sets for treatment strategy based on expected relapse rates for classes of inmates. Canadian Journal of Criminology & Corrections, 1968, 10, 288-301.
- Clemmer, D. The prison community. New York: Holt, Rinehart & Winston, Inc., 1958.
- Cowden, J.E. & Pacht, A.B. Predicting institutional & post release adjustment of delinquent boys. Journal of Consulting Psychology, 1967, 31, 377-381.
- Cymbalisky, B.Y., Schuck, S.Z., & Dubeck, J.A. Achievement level, institutional adjustment and recidivism among juvenile delinquents. Journal of Community Psychology, 1975, 3, 289-294.

- Desroches, F. Regional psychiatric centres: A myopic view. Canadian Journal of Criminology & Corrections, 1973, 15, 3-22.
- Dell'Apa, F., Adams, W.T., Jorgenson, J.D., & Sigurdson, H.R. Advocacy, brokerage, community: The ABC's of probation & parole. Federal Probation, 1976, 40, 37-44.
- Flanagan, J.J., & Lewis, G.R. First prison admission with juvenile histories & absolute first offenders: Frequencies & MMPI profiles. Journal of Clinical Psychology, 1974, 30, 358-360.
- Ganzer, F.J. & Sarason, I.G. Variables associated with recidivism among juvenile delinquents. Journal of Consulting & Clinical Psychology, 1973, 40, 1-5.
- Gendreau, P. & Leipziger, M. The measurement of recidivism and its application in Ontario. Canadian Journal of Corrections, 1977 in press.
- Gough, H.G., Wenk, E.A., & Rozyko, V.V. Parole outcome as predicted from the CPI, the MMPI, & a base expectancy table. Journal of Abnormal Psychology, 1965, 70, 432-441.
- Griffiths, A.W., & Rundle, A.T. A survey of male prisoners. British Journal of Criminology, 1976, 16, 352-366.
- Grygier, T., Blum, F., & Porebski, O.R. Decision & outcome: Studies in parole prediction. Canadian Journal of Criminology & Corrections, 1971, 13, 133-146.
- Guze, S.B. a study of recidivism based upon a follow-up of 217 consecutive criminals. Journal of Nervous & Mental Disease, 1964, 138, 575-581.
- Lambert, L.R. & Madden, P.G. The adult female offender: The road from institution to community life. Canadian Journal of Criminology & Corrections, 1976, 18, 3-15.
- Macdonald, G. & Bygott, J. Impact of beverage alcohol on the criminal justice system: A pilot study. Toronto, Ont., Provincial Secretariat for Justice, 1977.
- Madden, P.G. Extracting Data on Returns from Placement From the Juvenile Information System, Toronto, Ontario: Ontario Ministry of Correctional Services, 1976.
- Madden, P.G. & Lambert, L.R. The Vanier Centre for Women: Length of Time in Vanier, Attitudes and First Year Recidivism, Toronto, Ontario: Ontario Ministry of Correctional Services, 1974.
- Mandel, N.G., Collins, B.S., Morran, M.R., Barron, A.J., Gelbmann, F.J., Godbois, C.B. & Kaminstein, P. Recidivism studied and defined. Journal of Criminal Law, Criminology & Police Science, 1965, 56, 59-66.
- Martin, E. A mathematical analysis of "Some characteristics of recidivists . . ." Canadian Journal of Criminology & Corrections, 1977, 19, 196-205.
- Martinson, R. What Work? - questions & answers about prison reform. Public Interest, 1974, 35, 22-54.
- Maskin, M.B., & Brookins, E. The effects of parental composition on recidivism rates in delinquent girls. Journal of Clinical Psychology. 1974, 30, 341-342.
- Merton, R.K. Social theory & social structure. Glencoe, Ill.: Free Press, 1949.

- Nassi, A.J. Therapy of the absurd: A study of punishment & treatment in California prisons & the roles of psychiatrists & psychologists. Corrective & Social Psychiatry & Journal of Behavior Technology, Methods & Therapy, 1975, 21, 21-27.
- O'Donnell, C.R., & Stanley, K.G. An adult furlough center: Correlates of parole success. Journal of Community Psychology, 1974, 2, 83-85.
- Platt, J.J., & Labate, C. Recidivism in youthful heroin offenders & characteristics of parole behavior & environment. International Journal of Addictions, 1976, 11, 221-236.
- Polonoski, M. The Community Adjustment of Male Training School Recidivists: III. The Total Experience, Toronto, Ontario: Ontario Ministry of Correctional Services, October, 1976.
- Roberts, A.H., Erikson, R.V., Riddle, M., & Bacon, J.G. Demographic variables, base rates & personality characteristics associated with recidivism in male delinquents. Journal of Consulting & Clinical Psychology, 1974, 42, 833-841.
- Sampson, A. Post-prison success prediction. Criminology, 1974, 12, 155-173.
- Schur, E.M. Radical nonintervention: Rethinking the delinquency problem. Englewood Cliffs, N.J.: Prentice-Hall, 1973.
- Smith, J., & Lanyon, R.I. Prediction of juvenile probation violators. Journal of Consulting & Clinical Psychology, 1968, 32, 54-58.
- Sone, I. Community Resource Centre Study. Toronto, Ontario: Ontario Ministry of Correctional Services, December, 1976.
- Sutherland, E.H., & Cressey, D.R. Principles of criminology (7th Ed). New York: Lippincott, 1966.
- Szabo, D. Comparative criminology. Journal of Criminal Law & Criminology, 1975, 66, 366-379.
- Tittle, C.B. Prisons & rehabilitation: the inevitability of disfavor. Social Problems, 1974, 21, 385-395.
- Unkovic, C.M., & Ducsay, W.J. An application of configurational analysis to the recidivism of juvenile delinquent behavior. Journal of Criminal Law, Criminology & Police Science, 1969, 60, 340-344.
- Virkkunen, M. Parental deprivation & recidivism in juvenile delinquents. British Journal of Criminology, 1976, 16, 378-384.
- Warren, M.Q. The case for different treatment of delinquents. Annals of the American Academy of Political & Social Sciences. 1969, 381, 47-59.

**END**