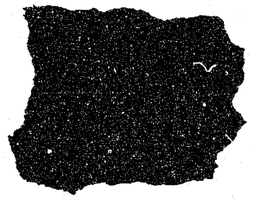
If you have issues viewing or accessing this file contact us at NCJRS.gov.

2187

THE LAZAR INSTITUTE
McLean, Virginia

EMPLOYMENT SERVICES FOR EX-OFFENDERS FIELD TEST



U.S. Department of Justice
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice

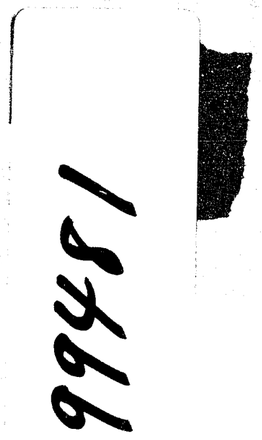
Permission to reproduce this copyrighted material has been granted by

Public Domain/NIJ
US Department of Justice

to the National Criminal Justice Reference Service (NCJRS)

Further reproduction outside of the NCJRS system requires permission of the copyright owner

- SUMMARY REPORT -



99481

EMPLOYMENT SERVICES FOR EX-OFFENDERS FIELD TEST

- Summary Report -

NCJRS
JUN 5 1985
ACQUISITIONS

Prepared for

National Institute of Justice
U.S. Department of Justice

PROJECT STAFF

Raymond H. Milkman, Principal Investigator
Anita D. Timrots, Principal Research Associate
Ann V. Peyser, Research Associate
Mary A. Toborg, Co-Investigator
Barbara E. Gottlieb, Research Associate
Anthony M.J. Yezer, Consulting Investigator for Statistical Analysis
Lynn Carpenter, Research and Administrative Associate
Nancy Landson, Project Administrator

Prepared under Cooperative Agreement Number 80-IJ-CX-K013 from the National Institute of Justice, U.S. Department of Justice. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the Department of Justice.

NCJ-99481

June 1985

The Lazar Institute
6726 Lucy Lane
McLean, Virginia 22101
(703) 821-0900

ABSTRACT

During the period 1980-1985, the National Institute of Justice (NIJ) sponsored a controlled experiment in the employment services field to test the hypothesis that job counseling and placement services, accompanied by intensive follow-up after placement, would significantly increase the effectiveness of employment programs for recent prison releasees. Typically, employment services have little contact with their clients after they are placed, and some experts had concluded that this was a major shortcoming.

The test was structured to include three ongoing and reputedly exemplary employment services programs, all of which agreed to adhere to a predetermined experimental design. The programs were:

- The Comprehensive Offender Employment Resource System (COERS) in Boston;
- Project JOVE in San Diego; and
- The Safer Foundation in Chicago.

A total of 2,045 individuals recently released from adult correctional facilities and with a history of primarily income-producing offenses participated in the field test as program clients: 511 in Boston, 934 in Chicago, and 600 in San Diego.

The experimental design was of a standard nature and allowed participants in each site to be assigned to (1) an experimental group that received both comprehensive employment-related services (for example, job counseling and placement assistance) and special follow-up services for six months after they were placed, or (2) a control group that received normal services only. In addition, comparison groups consisting of program participants who were not placed were formed so that an assessment of the general value of employment services could be made.

The results of this evaluative research will not be particularly encouraging to those who believe that intensive employment and follow-up services are an essential part of the post-incarceration process, for:

- The research experiment, which allowed randomly assigned experimental and control groups to be compared, did not demonstrate that special follow-up services decreased the chances of long-term criminal recidivism.
- The overall evaluation research, however, which included analysis of placed versus not placed participants, did show that employment itself can be a factor in decreasing recidivism. The evidence to support this thesis was found in Chicago, where clients placed by the Safer Foundation had significantly lower recidivism rates than those who were not placed.
- Other results that are not particularly surprising emerged from the statistical regression analysis that was conducted. These include the findings in at least one site that:
  - —past drug and alcohol abusers and individuals with a long criminal history tended to have significantly higher criminal recidivism than those without these characteristics; and
  - —older and married individuals had significantly lower recidivism rates than their younger and unmarried counterparts.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENTS

This field test could not have been conducted without the cooperation and support of numerous Federal officials as well as ex-offender employment program staff. We would especially like to thank the many officials at the National Institute of Justice who helped implement the project. In particular, we wish to thank the NIJ evaluation project monitors, Dr. Lawrence A. Bennett, Mr. W. Phillip Travers, and Dr. Richard S. Laymon, as well as the NIJ field test manager, Mr. John Thomas, and his support consultant, Mr. Gary Reiner. Many other NIJ officials provided us with useful comments throughout the course of the research, and we appreciate the time they took to review the project, particularly in its design stage.

Directors and staff of the ex-offender employment programs studied also gave us a great deal of help; and, in particular, we are grateful to the following persons for the assistance they provided: Ms. Lynn Foster, former Executive Director, and Mr. Tom Coury, present Executive Director, Comprehensive Offender Employment Resource System, Boston, Massachusetts; Mr. George Knox, Director, Research Division, Mr. Gus Wilhelmy, Deputy Director, Planning and Development, and Raymond P. Curran, Executive Director, Safer Foundation, Chicago, Illinois; and Mr. Fred Bellinger, Project Director, and Mr. Thomas V. A. Wornham, Executive Director, Project JOVE, San Diego, California.

I. INTRODUCTION

When an offender is released from prison, he faces many challenges readjusting to life outside of the institution and resisting a return to crime. The judicial system has recognized this fact and, in an effort to reduce recidivism, almost always requires employment of parolees. While the theory that an inverse relationship exists between recidivism and employment has not been definitively proven, widespread acceptance of this relationship has resulted in the development of employment services programs specifically designed to aid ex-offenders. These programs attempt to help the ex-offender overcome his typically poor education, lack of skills, and deficient work history and find suitable employment.[1] In addition, many programs offer job counseling services and assistance in adjustment to the work environment in an effort to encourage long-term employment. By providing these services and consequently increasing the employment rate within the client population, these programs are intended to reduce recidivism among ex-offenders.

Sociological and economic theories linking an increase in employment to a reduction in crime have provided a substantial amount of justification for the existence of such employment services programs for ex-offenders. These theories support the idea that employment services programs can reduce the recidivism rate among ex-offenders through job counseling and placement: assistance that provides clients with the economic means or social environment needed to overcome their deprived status. All of these theories acknowledge a relationship between crime and unemployment, but each theory differs in its rationale for the individual's choice of criminal behavior.

Sociological opportunity theories emphasize the tension between the social goals that an individual adopts and the means that the individual possesses to attain these goals. For example, if an individual desires material success but lacks the skills, education, and work experience to achieve this goal, the individual may turn to crime to resolve the conflict between goals and opportunities. It has been therefore hypothesized that employment services programs can help many ex-offenders resolve this conflict in a more constructive manner by increasing the legitimate economic opportunities available to them.[2]

Theories of differential association also view criminal behavior as a result of the social environment but place special emphasis on the social peer group of which the individual is a member. When an individual's social peer group positively reinforces criminal behavior and attitudes, the individual may choose criminal behavior as the most attractive option available to him. Conversely, job placement in a work environment that furnishes a peer group which views crime unfavorably may decrease the desirability of the option of criminal behavior and thereby reduce recidivism.[3]

Economic theories linking crime and unemployment also focus on the individual's choice of the most desirable option available to him, but diverge from sociological theories in the economist's view of the individual as a rational person making economic choices when considering crime. According to economic theory, the individual may choose crime when: (1) his level of economic deprivation is great; (2) his legitimate opportunities are limited; (3) the benefits of criminal behavior outweigh its costs; and (4) the real and perceived risks involved in committing a crime are minimal.[4] If job placement services could increase employment

and, consequently, reduce the individual's economic motivation to engage in criminal behavior, then employment services programs would achieve their goal of reducing recidivism.

Employment services programs have not always succeeded in attaining their objectives, however. In recent years, the validity of the theory that employment services programs can reduce recidivism by providing job placement assistance has been questioned, and experiments to test the effectiveness of such services in reducing recivism have generally not yielded definitive results.

For instance, the LIFE (Life Insurance for Ex-Offenders) experiment provided little encouragement for the provision of employment services to ex-offenders to reduce recidivism. The hypothesis of this experiment was that the provision of financial assistance and/or job placement services would reduce recidivism by decreasing the individual's financial motivation to engage in criminal activity. The experiment showed that while financial assistance appeared to be effective in reducing recidivism,[5] job placement services did not reduce rearrest rates. Job placement services also failed to increase the employment rate among those clients who were offered services. Clients who were placed and who were steadily employed, however, had lower recidivism rates than those clients who were not placed.[6] This finding may indicate that employment services programs could have a positive impact on recidivism if increases in employment rates could be achieved and a means to maintain employment could be found.

The TARP (Transitional Aid for Ex-Offenders) experiment reached similar conclusions concerning the impact of employment services on crime among ex-offenders, finding, in part, that both job placement services

and financial assistance had little or no impact on recidivism. Findings concerning job placement services were considered inconclusive, however, because the extent and type of job placement services offered to TARP participants were not documented.[7]

Because of the inconclusive nature of experiments such as LIFE and TARP regarding the effectiveness of employment services programs, a number of experts still believe that employment services can be effective in increasing employment and decreasing recidivism if implemented properly. Furthermore, it has been hypothesized that the effectiveness of such programs could be enhanced not only by proper implementation but also by extended contact with the client during the post-placement period.

Historically, employment services programs have severed contact with the client immediately after job placement. If any follow-up occurs, it is usually limited to periodic telephone contact with the employer to determine if the client is still employed. The programs generally cease to provide support to the client during the post-placement period, virtually abandoning him during this crucial time in his adjustment to life outside of the institution. Little or no time is devoted to crisis intervention or adjustment counseling, services which many experts believe could help encourage non-criminal behavior.[8]

In order to bridge the gap in knowledge regarding the value of ongoing support services for ex-offenders placed in jobs, the National Institute of Justice awarded a grant to the Lazar Institute to test the hypothesis that job counseling and placement services accompanied by intensive follow-up after placement would significantly increase the effectiveness of employment programs for recent prison releasees. To

test the hypothesis, Lazar has evaluated the impact of three employment services programs that participated in an experiment designed to provide both "normal" and "special" (extended) employment services. The three programs were: the Comprehensive Offender Resource System (COERS) in Boston; the Safer Foundation in Chicago; and Project JOVE in San Diego.

The purpose of this report is to summarize the findings from this study of the impact of follow-up services on the employment and recidivism rates of the participating ex-offenders. The study compares the employment rates, wages, job stability and recidivism rates of the clients who received follow-up services to those who received either "normal" or no services. This study also compares the recidivism rate of program participants who were placed in jobs to that of participants who were not placed.

II. DESCRIPTION OF RESEARCH APPROACH

A. Design and Methodology

A total of 2,045 individuals participated in the field test for this study: 511 in Boston, 934 in Chicago, and 600 in San Diego. All of the participants met the following eligibility requirements:

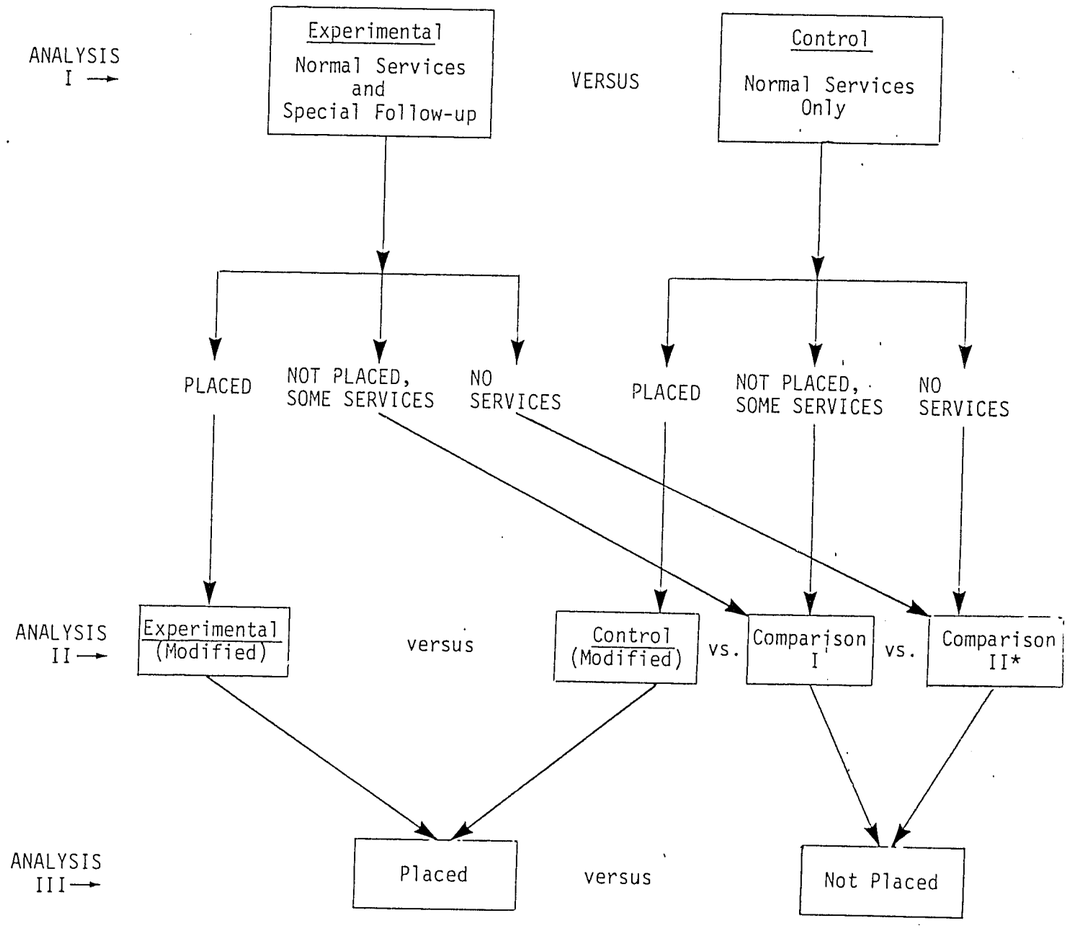
- Participants voluntarily accepted program services;
- Participants had been incarcerated at an adult Federal, State, or local correctional facility for at least three months and had been released within six months of program participation; and
- Participants exhibited a pattern of income-producing offenses; i.e., the majority of the ex-offenders' arrests or convictions were for income-producing crimes.

As illustrated in Figure 1, clients selected for participation were randomly assigned to the experimental or control group at each site. Clients from both groups who had not been placed by the end of the study or who had not received any services were placed in comparison groups so that an assessment of the general value of employment services could be made.

Initially, participants from all groups were offered the standard services available to all clients in the selected employment services programs.[9] In addition, each experimental group member was assigned to a follow-up specialist who provided emotional support and advocacy to the client during the job search as well as during the 180-day period following job placement. The special services provided during the post-placement period included weekly contact with the client, crisis intervention, and referral to other agencies when necessary.

To evaluate the impact that these enhanced employment services had on the recidivism and employment rates of experimental group clients,

FIGURE 1
ANALYSIS STRUCTURE: GROUP COMPARISONS



*This group not available in Boston.

rap sheets for each individual were obtained for approximately two years after the individual entered the program. In addition, data for each participant were collected at 30, 90, and 180 day intervals after job placement. These data included short-term employment and self-reported rearrest data as well as information regarding the services that each participant actually received. The Lazar Institute also documented the extent of services available to the client by completing comprehensive delivery systems analyses at each site. These analyses provided in-depth information concerning the types of services offered and the methods of implementation each program used.[10]

While employment services, recidivism, and short-term employment data were readily available for almost all participants, long-term employment data were not available for any of the participating clients because the study design limited client follow-up to six months after job placement. Short-term employment data was not available for clients who had dropped out of the program prior to the initial data collection period or who had never enrolled in the program. Since initial group assignment was random, this deficiency did not bias the comparison between the experimental and control groups. The study design, with its requirement of voluntary program participation, also precluded the formation of a randomly assigned no-services group. To compensate for the absence of such a group, a non-randomly assigned no-services group was formed that consisted of clients who had volunteered for the program but never actually enrolled in it.

B. Background Characteristics of Research Participants

Clients in the experimental and control groups were comparable at the three sites. The typical client from both groups was a single white male in his late twenties who had not completed high school. In-depth analysis of the demographic characteristics and arrest and employment histories of the participants revealed the following:

- The majority of the participants at all three sites were in their twenties. Twenty-three percent, 28 percent, and 31 percent of the Boston, Chicago, and San Diego clients respectively were over 30 years old. Only three percent of all participants were over 40. This age distribution appears to be consistent with past research relating age to criminal behavior and indicating that the majority of offenders are young and tend to mature out of crime.

- The overwhelming majority of this study's participants were male; only eight percent of the Boston and Chicago participants and 20 percent of the San Diego participants were female.

- Racial composition varied more than any other demographic characteristic across all three sites. Close to half of the Boston and San Diego participants were white, while only 15 percent of the Chicago participants were white. Blacks comprised 42 percent of the Boston study population, 34 percent of the San Diego study population, and 80 percent of the Chicago study population. San Diego had the only significant Hispanic group, with 16 percent of the participants there reporting Spanish origins.

- More than one-third of all participants had graduated from high school or earned a Graduate Equivalency Diploma. Eleven percent of the Boston participants, ten percent of the Chicago participants and 18 percent of the San Diego participants had some education beyond high school.

- Seventy-six percent of all participants in Boston, 71 percent in Chicago, and 58 percent in San Diego had never been married.

- Mean number of prior arrests was 14 arrests in Boston, eight arrests in Chicago, and 10 arrests in San Diego. The apparent difference between Boston and the other two sites may result from different data sources. In Boston, arrest information was only available from Massachusetts rap sheets. In San Diego and Chicago, prior arrest data were self-reported and, therefore, may have been less accurate than the Boston data.

- Over 80 percent of all study participants had worked at some time in their lives. Of the approximately one-third working

at the time of their most recent arrest prior to program participation, 50 percent of the Boston participants, 46 percent of the Chicago participants, and 41 percent of the San Diego participants had never held a job for more than 12 months. The mean number of months for the longest job ever held by a client ranged from 20 months in Chicago and Boston to 27 months in San Diego. These means, however, were inflated by a small number of participants who had worked at one job for more than four years.

- Salaries were generally quite low. Average weekly salaries ranged from $166.20 in Boston to $175.34 in Chicago to $203.50 in San Diego.

C. Program Services Provided to Research Participants

The primary goal of all three employment services programs was the placement of clients in unsubsidized jobs. In pursuit of this goal, all clients who enrolled in an employment services program received a minimum level of assistance, such as orientation or screening and evaluation. The programs usually combined these two services in an intake unit, processing all clients through this unit upon initial enrollment. The intake counselors assigned to the unit generally solicited a personal history from the client, identified the client's interests and skills, and acquainted the client with the services offered by the program. In addition, the intake counselor offered a limited number of clients support services such as food, transportation, clothing, and shelter in an attempt to meet the client's survival needs and prepare him for the job search.

Following intake, the client usually began to receive those services deemed most suitable for him by the intake counselor. In most cases, these services included a relatively brief job development seminar focusing on issues such as appropriate dress and deportment, typical job rules, goal setting, interviewing techniques, and job hunt strategies. After participating in the seminar, the client met with a job developer to review the client's goals and to draw up an agreement outlining each

party's responsibilities during the job search. The job developer assisted the client in various ways during the job search, depending upon the client's skills and level of confidence. In some cases, the job developer merely provided moral support and some coaching; in others, if the client's self-confidence was particularly low, the job developer actually contacted employers and accompanied the client on job interviews. The job developer also followed up on all placed clients at intervals of 30, 60, 90, and 180 days to determine employment status and sometimes attempted to reinvolve unemployed clients in the program.

During the job search, experimental group members also met with their follow-up counselor, who provided additional support both before and after placement. Such services were provided on approximately a weekly basis.

While job development, job counseling, job readiness training, orientation, needs assessment, screening, and evaluation were the most frequently provided services, each program also offered a wide range of other types of assistance. All of the programs in this study provided different types of specialized counseling. For instance, family counseling, legal services, counseling for youths, and special services for women were available to selected clients at most sites.

Another service that was offered to some clients was referral to other agencies. Although clients were rarely referred to other agencies in San Diego and Chicago, this option was frequently exercised in Boston. Clients were most commonly referred to other job development, job placement, and job counseling programs. For help that was beyond the scope of an employment program, clients with mental and physical handicaps were sent to the State Department of Rehabilitation. Referral to welfare and to housing and substance abuse programs also occurred occasionally for clients with serious financial or drug problems.

In addition to these programs, training and vocational education services funded under the Joint Partnership Training Act (formerly known as CETA programs) were offered to selected clients. Enrollment in these programs was limited, however, and was generally reserved for the neediest clients who had demonstrated the most potential for success. Some innovative services that actually provided employment opportunities for the clients, such as the Weatherization Program (a JOVE-sponsored business staffed by ex-offenders who weatherized low-income housing) and the Economic Development Program (a client-run printing press) in San Diego, were also available at specific sites.

III. RESEARCH RESULTS

A. Placement Rates

After entering an employment service program and receiving services, some clients succeeded in securing unsubsidized employment. An analysis of the placement rates of the participating clients showed:

- In Boston and San Diego, more than half of the placed clients were working less than one month after entering the program. In Chicago, however, the Safer Foundation placed most clients about two months after program entry. This delay in placement may be a result of the philosophy of the Safer Foundation, which seemed to place more emphasis than the other programs on preparing the client to enter the work force. Program personnel in Chicago articulated their concern that the client not only secure a job but also have a successful employment experience and maintain employment after being placed.

- Of the 63 percent of the Boston participants who were placed by COERS, 92 percent were placed in unsubsidized jobs. In Chicago, 39 percent of all participants were placed; 91 percent of these placements were in unsubsidized jobs. In San Diego, 55 percent of the clients were placed; 83 percent of the placed clients held unsubsidized jobs (see Table 1 for detailed results).

- Under six percent of all participating clients were placed in training or other miscellaneous programs such as public service jobs or education.

- As illustrated in Table 2, experimental group clients had higher placement rates than control group clients at all three sites. The statistically significant differences between experimental and control group clients may be due to the individualized attention that the experimental group clients received from their follow-up specialists during the job search.

B. Post-Placement Experience

After placement, clients from all groups were tracked by program staff at 30, 90, and 180 days. Over the course of the 180-day period, program staff found it increasingly difficult to track clients, especially control and comparison group clients whose contact with the program

TABLE 1
TYPE OF PROGRAM PLACEMENT BY GROUP

TYPE OF PLACEMENT	BOSTON						CHICAGO						SAN DIEGO					
	Experimental		Control		Total		Experimental		Control		Total		Experimental		Control		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No placement	68	31.5	73	45.1	141	37.3	110	39.6	206	82.1	316	59.7	77	36.0	58	63.7	135	44.3
Unsubsidized job	136	63.0	82	50.6	218	57.7	150	54.0	41	16.3	191	36.1	114	53.3	27	29.7	141	46.2
Skill training/public service job	6	2.8	0	0.0	6	1.6	13	4.7	4	1.6	17	3.2	13	6.1	3	3.3	16	5.2
General training and/or education	6	2.8	3	1.9	9	2.4	5	1.8	0	0.0	5	0.9	4	1.9	2	2.2	6	2.0
Job and skill training	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Job and general training and/or education	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0	1	0.3
Skill training and general training or education	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0	1	0.3
Other	0	0.0	4	2.5	4	1.1	0	0.0	0	0.0	0	0.0	4	1.9	1	1.1	5	1.6
Don't know	(0)	-	(3)	-	(3)	-	(0)	-	(0)	-	(0)	-	(0)	-	(0)	-	(0)	-
TOTAL	216	100.1	162	100.1	378	100.1	278	99.9	251	100.0	529	99.9	214	100.2	91	100.0	305	99.9

TABLE 2
SUMMARY OF EFFECT OF GROUP MEMBERSHIP ON PROGRAM PLACEMENT

PROGRAM SITE	Percentage of Clients Placed by Program		T-Value	Probability
	Experimental	Control		
Boston	68.5%	54.9%	2.72	.007
Chicago	75.9%	30.6%	9.50	.000
San Diego	73.9%	51.7%	3.28	.001

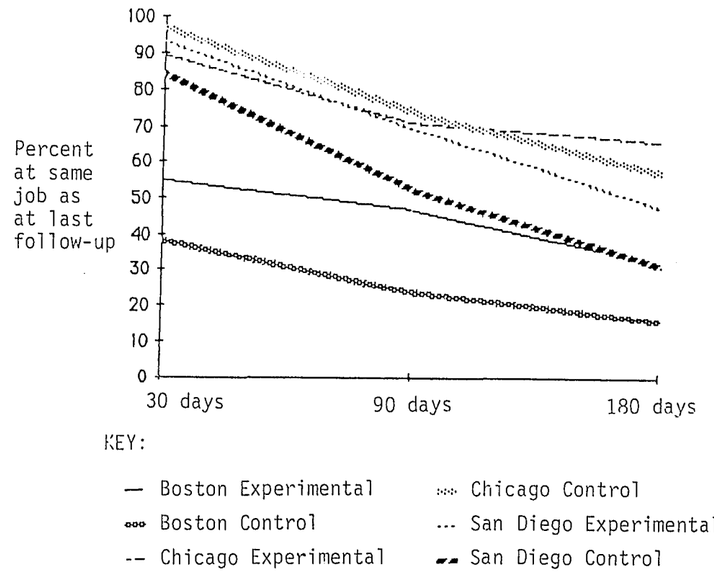
was infrequent and less personalized. This loss of clients from the data base could have biased the data either negatively or positively depending upon the reason the client severed his relationship with the program. In the majority of cases, however, the program staff were unable to determine why clients lost contact with the program and so the net effect of this attrition of participants was impossible to calculate.

Among the participants with whom the program maintained contact, it was hypothesized that the experimental group clients' employment rate would be higher than the control group clients' employment rate over time. The results of the analysis did not, however, support this hypothesis:

- No statistically significant differences existed between the employment rates of experimental and control group clients over time. Employment rates decreased in all cases between 30 and 90 days after placement but appeared to stabilize between 90 and 180 days. This finding is qualified, however, by the fact that programs began to lose contact with the clients during the 90- to 180-day period after placement.

- As illustrated by Figure 2, job stability decreased for all clients in all sites over time. Experimental group clients generally had a higher rate of job stability than control group clients except for the 30- and 90-day follow-up in Chicago. These differences, however, were not statistically significant.

FIGURE 2
PLACEMENT STABILITY BY GROUP



- Modified experimental group clients appeared to be easier to track than modified control group clients, probably as a result of the more personalized and more frequent service received by experimental group clients during the post-placement period. At 180 days after placement, the COERS program in Boston tracked 82 percent of the modified experimental group, while only 47 percent of the modified control group was tracked. In Chicago, the difference between the two groups was less pronounced, with 71 percent of the modified experimental group and 64 percent of the modified control group still being followed 180 days after placement. In San Diego, the modified control group was tracked at essentially the same rate as the modified experimental group (76 percent vs. 74 percent).

- Most job placements were for full-time jobs. The mean number of hours worked per week during the three follow-up periods for all three sites ranged from 34 to 40 hours per week.

- There were no statistically significant differences between the experimental and control groups regarding wages earned except in Chicago, where experimental group clients working at the time of the 180-day follow-up were earning an average of $41 more per week than working control group clients.

C. Recidivism Outcomes

In addition to studying job placement, job stability, and employment rates for the experimental and control groups, a primary focus of this research was the study of recidivism among participating ex-offenders. It was hypothesized that the special services and individualized attention provided to the experimental group clients would improve their ability to adjust to their new environment and, therefore, lower recidivism.

To investigate this hypothesis, recidivism data were gathered from the rap sheets of the participating clients. A combination of start dates from which to measure recidivism was used because the timing of each ex-offender's release from prison and commencement of program participation varied so widely. For example, some participants in San Diego began services while still incarcerated, while almost all participants in other cities began employment services at various times after their release from prison. Therefore, the later of the baseline date (date employment services began) or the prison release date was generally used as the start date.

Recidivism was then defined as the total number of arrests between the start date and the end of the follow-up period. In addition, two other primary measures of recidivism were used: the number of arrests for income-producing crimes and number of arrests for Part I offenses.[11] Additional data such as length of sentence (available in Chicago and San Diego) and length of incarceration (available in Chicago only) were used as supplementary measures of recidivism.

After all arrest data had been collected, recidivism measures were standardized to reflect the mean number of arrests per month because follow-up periods differed among sites. These arrest levels were then multiplied by 100 for readability. In addition, a cumulative percentage of clients who had been arrested at least once in any of the three arrest categories was calculated at intervals of one, three, six, 12, 18, and 24 months.

This analysis of the arrest data revealed that a majority of the study participants were rearrested during the follow-up period. As illustrated in Table 3, the recidivism rates of modified experimental group clients did not differ significantly from that of modified control group clients. However, clients who were placed by the employment services did appear to have lower recidivism rates than clients who were not placed. The magnitude of this finding varied across the three sites but placed clients demonstrated consistently lower rates of recidivism. Some highlights of the analysis include the following:

- During the long-term follow-up period, 62 percent of the Boston participants, 67 percent of the Chicago participants, and 57 percent of the San Diego participants were rearrested.
- The mean number of arrests for all three arrest categories was lower for placed clients compared to clients who were not placed in all three sites. These differences, however, were statistically significant only in Chicago. Individuals who were placed by the Safer Foundation were arrested significantly fewer times than clients who were not placed for all three arrest categories. This finding is consistent with the theory that employment programs can have an impact on recidivism when the employment rate of the client population increases as a result of employment services (see Table 4 for detailed results).
- Among the participants who recidivated, the most frequent number of rearrests was one.

TABLE 3
SUMMARY OF T-TEST RESULTS ON RECIDIVISM RATES
FOR PLACED OFFENDERS

RECIVISIM RATES BY SITE	Mean		T-TEST	
	Modified Experimental	Modified Control	T-Value	Probability
BOSTON				
Total number of arrests	1.45	1.25	.93	.35
Income-producing arrests	.98	.83	.82	.41
Part I arrests	.76	.72	.26	.80
CHICAGO				
Total number of arrests	1.33	1.25	.25	.80
Income-producing arrests	.90	.82	.28	.78
Part I arrests	.83	.80	.10	.92
Number of months	17.18	7.56	1.54	.13
Number of months served	.92	1.21	- .59	.56
SAN DIEGO				
Total number of arrests	.98	1.07	- .31	.76
Income-producing arrests	.64	.61	.16	.87
Part I arrests	.36	.54	- .78	.44
Number of months sentenced	8.67	12.93	- .49	.63

TABLE 4
SUMMARY OF T-TEST RESULTS ON
REARREST RATES BY PLACEMENT

RECIDIVISM MEASURES	Placed	Not Placed	T-TEST	
			T-Value	Probability
BOSTON				
Mean Arrest Rates*				
For all offenses	6.7	7.8	-1.41	.26
For income-producing offenses	4.5	5.4	-1.15	.25
For Part I offenses	3.6	4.9	-1.78	.08
CHICAGO*				
Mean Arrest Rates				
For all offenses	5.8	8.8	-3.40	.00
For income-producing offenses	3.9	5.6	-2.25	.02
For Part I offenses	3.6	5.4	-2.45	.02
Mean Number Months Sentenced	15.2	26.9	-1.64	.10
Mean Number Months Served	1.0	2.2	-3.58	.00
SAN DIEGO*				
Mean Arrest Rates				
For all offenses	5.3	6.4	-1.26	.21
For income-producing offenses	3.4	4.4	-1.48	.14
For Part I offenses	2.1	2.7	-1.22	.22
Mean Number Months Sentenced	9.5	8.8	.24	.81

*Arrest rates were calculated by dividing the number of arrests during the follow-up period by the length of the long-term period (which was 20.5 months for Boston, 22.5 months for Chicago, and 19 months for San Diego) and multiplying that number by 100.

- The three most common first offenses occurring during the follow-up period in order of frequency were: burglary/breaking and entering, larceny/theft, and robbery (Boston); larceny/theft, burglary/breaking and entering, and robbery (Chicago); and burglary/breaking and entering, possession of drugs, and larceny/theft (San Diego).

- In Boston and San Diego, 69 percent of the classificable offenses were income-producing. In Chicago, the rate of income producing offenses was slightly lower at 63 percent.

As illustrated in Figures 3, 4, and 5, further analysis of cumulative arrest rates for all three sites yielded some statistically significant relationships in Chicago and Boston. (These relationships are indicated in the figures by brackets connecting the two significantly different groups.) In Boston, modified control group members had a lower cumulative arrest rate than the comparison group I members (the clients who received services but were not placed) at the 180-day follow-up. Because this relationship occurs only once, it probably should not be emphasized. In Chicago, comparison group I clients had a higher cumulative arrest rate than the comparison group II clients (clients who received no services) after six, twelve and 24 months. Lazar speculated that this relationship may have existed because: (1) comparison group II clients did not receive services because they had found a job on their own and were, therefore, less likely to recidivate, or (2) comparison group I clients were "unemployable," i.e., even with assistance, these clients could not find employment and were, therefore, more likely to recidivate. Because it was beyond the scope of this study to either verify employment for the no-services group or determine the employability of the clients who were not placed, no conclusions could be drawn regarding this relationship between the two Chicago comparison groups.

FIGURE 3
COMPARISON OF ARREST RATES OVER TIME: BOSTON

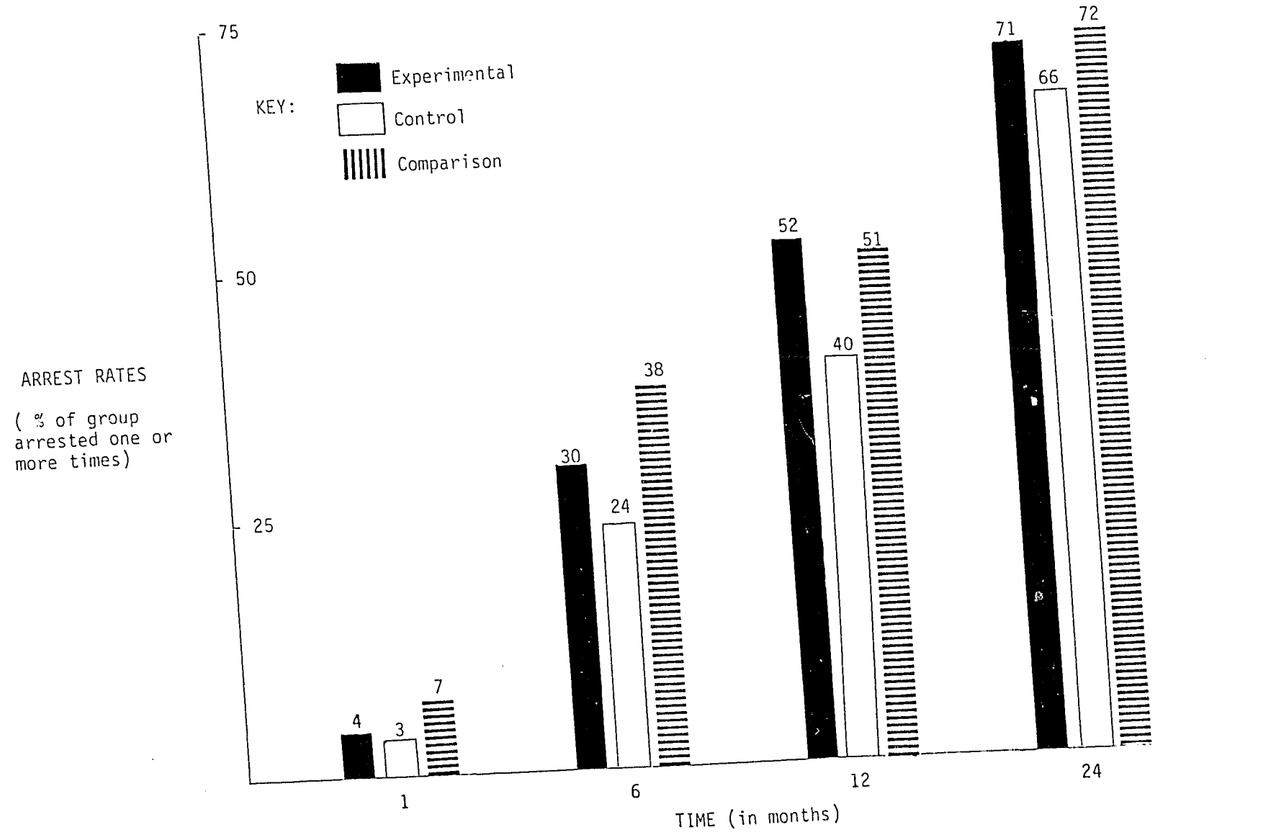


FIGURE 4
COMPARISON OF ARREST RATES OVER TIME: CHICAGO

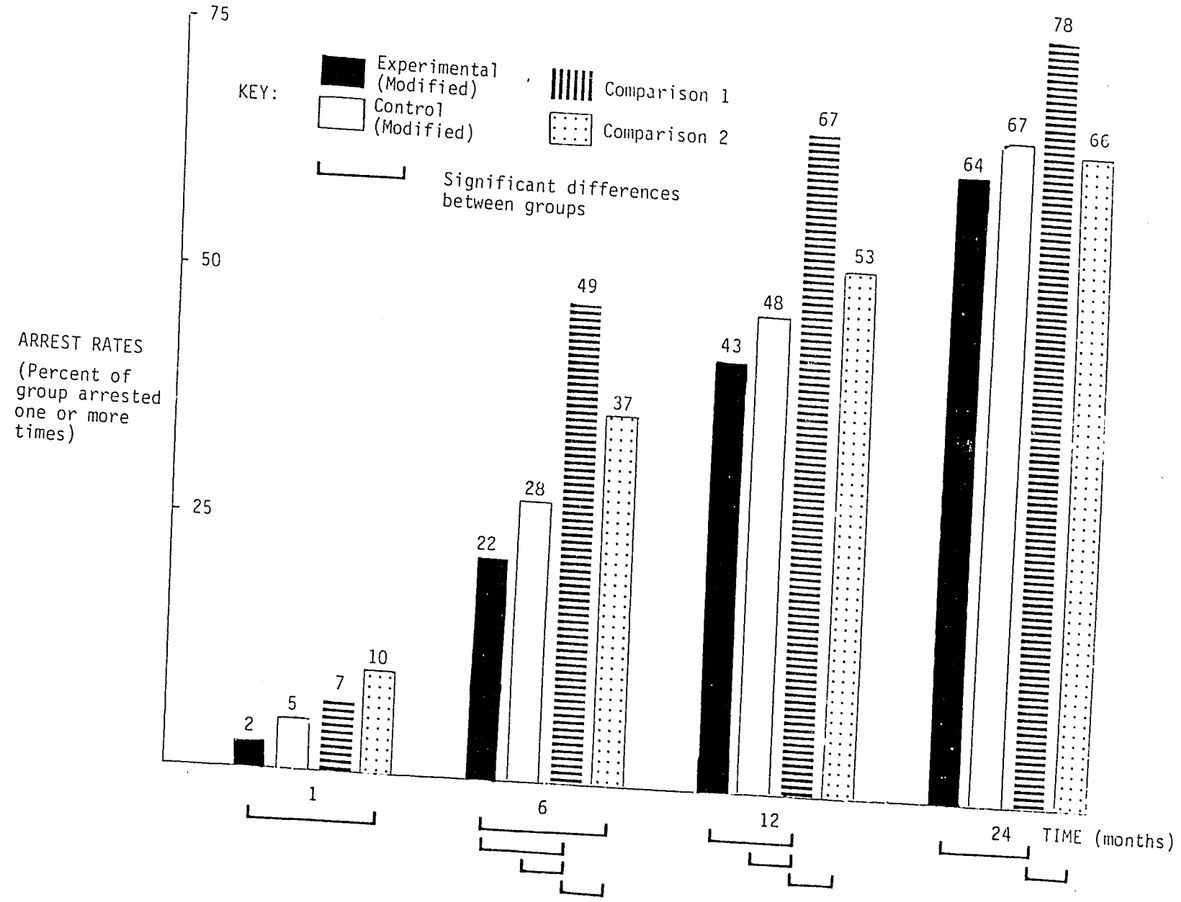
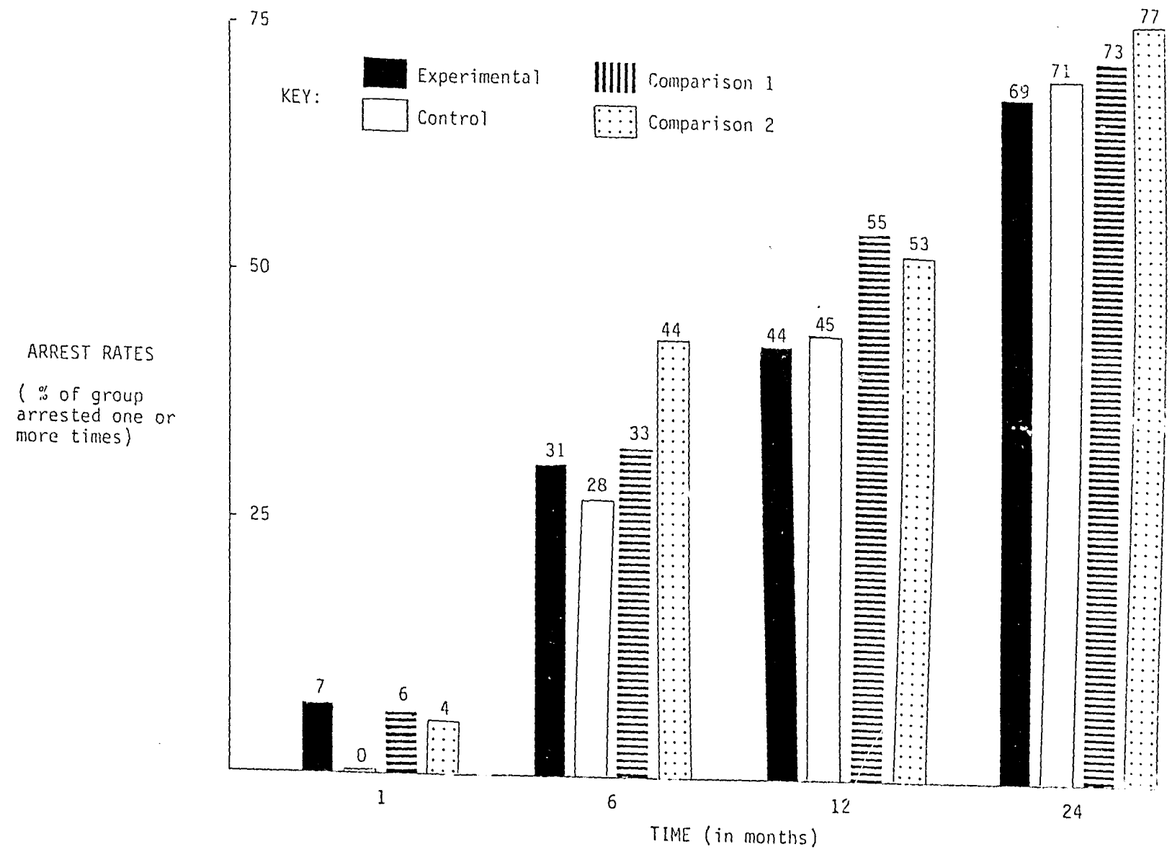


FIGURE 5
COMPARISON OF ARREST RATES OVER TIME: SAN DIEGO



D. Regression Analysis of Recidivism Outcomes

In order to gain a better understanding of long-term recidivism rates, a set of independent variables was regressed on the total number of arrests, the number of income-producing arrests, and the number of Part I arrests, using ordinary least squares. Independent variables in the equation included:

- age;
- race (dummy-coded 1 = black);
- sex (dummy-coded 1 = male);
- marital status (dummy-coded 1 = married);
- number of dependents;
- number of years of education;
- number of adult arrests (Boston only);
- criminal history scale (Chicago and San Diego only);
- work history scale;
- prior drug or alcohol use (dummy-coded 1 = past user);
- group membership (dummy-coded 1 = experimental);
- number of hours of group program services received;
- number of hours of personal program services received;
- program completion rate; and
- placement status (dummy-coded 1 = placement by program).

The criminal history scale consisted of three variables:

- number of arrests after age 16;
- number of convictions after age 16; and
- number of times incarcerated as an adult.

A reliability test of the scale revealed inter-item correlations of .65 for Chicago and .61 for San Diego. The standardized alpha values were .85 for Chicago and .82 for San Diego.

The work history variables were:

- whether or not the individual had ever worked;
- employment status at the time of most recent arrest prior to program participation;
- number of months at most recent job;
- number of hours worked at most recent job; and
- number of months at longest job ever held.

The inter-item correlations were .17 for Boston, .41 for Chicago, and .13 for San Diego. The standardized alpha values were .45 for Boston, .78 for Chicago, and .37 for San Diego.

The regression analysis yielded several independent variables that were significant predictors of long-term recidivism. These significant predictors occurred in at least one regression equation but were not necessarily present in all sites or for all three dependent variables. Among the independent variables, three demographic characteristics proved to be significant predictors:

- In Boston and San Diego, age was inversely related to all three dependent variables. In addition, black people were predicted to have higher recidivism rates for two of the dependent variables in those two cities;
- In Boston only, the regression analysis predicted that married individuals would have lower arrest rates for income-producing offenses in the long term.

Not surprisingly, the regression analysis also showed that individuals with greater past involvement in crime would predictably have greater future involvement in crime. This relationship was found in Boston for all three dependent variables and in Chicago for income-producing and Part I arrests. In addition, in Chicago admission to past drug and alcohol use by the participant was positively related to income-producing, Part I and total arrests.

Disappointingly, the work history scale variable was insignificant for all three dependent variables at the three sites, although the sign of the regression coefficient was negative in all cases. In addition, the regression analysis discovered a weak relationship between program services and long-term recidivism. The number of hours of program services received were inversely related to total number of arrests (in Boston and San Diego) and number of arrests for income-producing offenses (in San Diego only).

A more encouraging result was found in Chicago, where placed study participants were found to have a lower number of arrests over the long term. This finding is consistent with the analysis of recidivism rates for placed participants compared to non-placed participants in Chicago for the short term.

IV. POLICY IMPLICATIONS

The results of this evaluative research reveal that specialized, intensive assistance to ex-offenders during the initial months of their employment does not, as had been hypothesized, result in lower rates of long-term criminal recidivism. Clients of the three employment services programs who received such post-employment support were just as likely to engage in criminal activities in the two years following receipt of such services as clients who did not receive such support. As a consequence, there appears to be no justification for encouraging employment services programs to provide such post-employment assistance.

In one of the three sites studied, however, the results suggested that the acquisition of employment in and of itself decreases the rate of recidivism. In Chicago, clients who obtained jobs—regardless of whether they received post-employment services—had lower rates of recidivism than those who did not. This finding may be significant with regard to the provision of intensive individualized services during the job search period, because in all three sites, experimental group clients were more likely to obtain employment. In each case approximately 60 percent of all experimental group clients were placed in jobs.

Since this study did not focus on the difference in treatment during the job search period for those receiving post-employment services (versus the treatment for those who did not receive such services), there is no conclusive evidence that these differences affected job placement. However, the fact of the higher placement rates in all three sites combined with the delivery systems analysis suggests the possibility that these differences had a positive impact on clients' success in obtaining

employment. Given the correlation in the Chicago site between obtaining employment and lower rates of criminal recidivism, it may, therefore, be worthwhile to further explore a policy that emphasizes the provision of more intensive, individualized services during the job search period.

It is difficult, given the nature of the findings, to draw definitive conclusions about the overall utility of employment services programs. In every case, approximately 60 percent of those assisted returned to criminal behavior. Conversely, however, approximately 40 percent of the ex-offenders did not engage in such behavior, and a significant percentage of those were gainfully employed.

NOTES

1. Joan Petersilia, Peter W. Greenwood, and Marvin Lavin, Criminal Careers of Habitual Felons (Santa Monica, California: The Rand Corporation, 1977); George A. Pownall, Empirical Problems of Released Prisoners, U.S. Department of Labor, Manpower Administration, Contract with the University of Maryland, 1969; Roberta Rovner-Pieczenik, Manpower Research Monograph No. 28 (Washington, D.C.: U.S. Department of Labor, 1973); Robert Taggart III, The Prison of Unemployment: Manpower Programs for Offenders (Baltimore, Maryland: The Johns Hopkins University Press, 1972).

2. Robert K. Merton, "Social Structure and Anomie" (American Sociological Review, Volume 3, October 1938, pp. 672-682); Richard A. Cloward and Lloyd Ohlin, Delinquency and Opportunity: A Theory of Delinquent Gangs (New York: MacMillan, 1970); National Institute of Justice, "Test Design: Employment Services for Ex-Offenders," April 1980, pp. 2, 3.

3. Edwin H. Sutherland and Donald R. Cressey, Criminology, 8th ed., (New York: J.B. Lippincott Company, 1970); National Institute of Justice, "Test Design: Employment Services for Ex-Offenders," April 1980, pp. 2,3.

4. Sheldon Danziger and David Wheeler, "The Economics of Crime: Punishment or Redistribution," Review of Social Economy 33 (October 1975), pp. 113-131; National Institute of Justice, "Test Design: Employment Services for Ex-Offenders," April 1980, pp. 2,3.

5. Kenneth J. Lenihan, Unlocking the Second Gate: The Role of Financial Assistance in Reducing Recidivism Among Ex-Prisoners, R & D Monograph 45, U.S. Department of Labor, Employment and Training Administration (Washington, D.C.: U.S. Government Printing Office, 1977).

6. Charles Mallar and Craig V.C. Thornton, "Transitional Aid for Released Prisoners: Evidence from the LIFE Experiment," Human Resources 13 (1978), p. 211.

7. Peter H. Rossi, Richard A. Berk, and Kenneth J. Lenihan, Money, Work, and Crime: Experimental Evidence (New York: Academic Press, 1980); Lenihan and Rossi, "Crime and Poverty: Some Experimental Evidence from Ex-Offenders," American Sociological Review 45 (October 1980); Charles L. Smith, Pablo Martinez, and Daniel Harrison, An Assessment: The Impact of Providing Financial Assistance to Ex-Prisoners (Huntsville, Texas: Texas Department of Corrections, 1978); and Jack L. Stephens and Lois W. Sanders, Transitional Aid for Ex-Offenders: An Experimental Study in Georgia (Atlanta: Georgia Department of Offender Rehabilitation, 1978).

8. Michael E. Borus, Einar Hardin, and Terry A. Patterson, "Job Placement for Ex-Offenders: An Evaluation of the Michigan Comprehensive Manpower Program," Journal of Human Resources, Volume II (Summer 1976), pp. 391-401; Cicero Wilson, Kenneth Lenihan and Gail A. Goolkasian, Employment Services for Ex-Offenders: Program Models (Washington, D.C.: U.S. Department of Justice, National Institute of Justice, Government Printing Office, March 1981).

9. The standard services offered by each program most frequently consisted of a needs assessment and preplacement interview by an intake counselor, a relatively brief job development seminar, and job search assistance. Please refer to the section entitled "Program Services Provided to Research Participants" for a more detailed description of these services.

10. More detailed findings are presented in three full-length reports that are available from the authors.

11. See Appendix A for a more detailed description of these three categories.

APPENDIX A

DEFINITIONS OF OFFENSES INCLUDED AND EXCLUDED FROM ANALYSES

Three different measures of recidivism are referred to in this study: the total number of times an individual has been arrested, the number of arrests for income-producing offenses, and the number of Part I offenses. These measures are defined below.

Total Number of Arrests

Offenses Included: All Part I offenses, simple assault, forgery and counterfeiting, fraud, embezzlement, stolen property (receiving and possessing), unlawful use of weapon, possession of burglary tools, prostitution, possession of drugs, gambling, trespassing, property damage, escape, fugitive, driving under the influence (resulting in incarceration), unspecified parole violations resulting in parole revocation.

Offenses Excluded: Resisting, fighting, traffic offenses, begging, failure to appear, disorderly conduct, obstruction, contempt, under the influence of drugs, possession of drug paraphernalia, false identification, common nightwalking, lewdness, drinking in public, illegitimacy, parole violations not resulting in parole revocation, non-support, possession of open container, revoked/suspended license.

Income-Producing Offenses

Offenses Included: Burglary/breaking or entering, robbery, larceny, motor vehicle theft, arson, forgery and counterfeiting, fraud, embezzlement, stolen property, prostitution, drug laws (intent to distribute or selling), gambling, and possession of burglary tools.

Offenses Excluded: Unlawful taking of motor vehicle, begging, all other offenses not mentioned above.

Part I Offenses

Offenses Included: Criminal homicide, forcible rape, robbery, aggravated assault, burglary/breaking or entering, larceny/theft (excluding motor vehicle theft), motor vehicle theft, and arson.

Offenses Excluded: All other offenses.

Additional definitions include:

Modified experimental group: group consisting of experimental group clients who were placed.

Modified control group: group consisting of control group clients who were placed.

APPENDIX B

REFERENCES

REFERENCES

Allison, John P. "Economic Factors and the Rate of Crime." Land Economics Volume 48 (May 1972), 193-196.

Becker, Gary S. "Crime and Punishment: An Economic Approach." Journal of Political Economy, Volume 76 (1968), 169-217.

Berk, Richard A.; Lenihan, Kenneth J.; and Rossi, Peter H. "Crime and Poverty: Some Experimental Evidence From Ex-Offenders." American Sociological Review, Volume 45 (October 1980), 766-786.

Block, Michael K.; and Heineke, John M. "A Labor Theoretic Analysis of the Criminal Choice," American Economic Review, Volume 65 (June 1975), 314-325.

---------- and Lind, Robert C. "An Economic Analysis of Crimes Punishable by Imprisonment." Journal of Legal Studies, Volume 4 (June 1975), 479-492.

----------. "Crime and Punishment Reconsidered," Journal of Legal Studies Volume 4 (Jan 1975), 241-247.

Bonger, William A. Criminality and Economic Conditions Boston: Little, Brown, 1916.

Borus, Michael E.; Hardin, Einar; and Terry, Patterson A. "Job Placement for Ex-Offenders: An Evaluation of the Michigan Comprehensive Manpower Program," Journal of Human Resources, Volume 11 (Summer 1976). 391-401.

Brenner, Harvey M. Effects of the Economy of Criminal Behavior and the Administration of Criminal Justice: A Multi National Study. Baltimore, MD: Johns Hopkins University Press, 1975.

Center for Econometric Studies of the Justice System, Hoover Institution. "Property Crime and the Returns to Legitimate and Illegitimate Activities" Technical Report, CERDCR-2-78.

Clevenger, L. Stanley and Stanton, John M. "Should an Inmate Have a Job Before Being Released on Parole?" National Probation and Parole Association Journal. Volume 6, (April 1960), 159169.

Cloward, Richard A. and Ohlin, Lloyd. Delinquency and Opportunity: A Theory of Delinquent Gangs. New York: MacMillan, 1970.

Cohn, Richard M. "The Effect of Employment Status Change on Self Attitudes." Social Psychology. Volume 42 (1978), 81-93.

Cook, Philip. "The Correctional Carrot: Better Jobs for Parolees." Policy Analysis. Volume 1 (Winter 1975), 11-54.

Cook, Thomas D. and Campbell, Donald T. Quasi-Experimentation: Design and Analysis Issues for Field Settings. Boston: Houghton, Mifflin Company, 1979.

Cormack, Margaret. "The Association Between Crime and Unemployment: A Pilot Study in Scotland." In Economic Crises and Crime. United Nations Social Defence Research Institute, Publication No. 15, Rome, May 1976, 85-101.

Danziger, Sheldon and Wheeler, David. "The Economics of Crime: Punishment or Redistribution." Review of Social Economy, (October 1975), 113-131.

----------. "Malevolent Interdependence, Income, Inequality, and Crime." Readings in Correctional Economics, American Bar Association, Correctional Economics Center, Washington, D.C., 1975.

Dobbins, D. A. and Bass, Bernard M. The Louisiana Ex-Prisoners Employment Opportunities, Research Report No. 4 Baton Rouge, Louisiana, Department of Institutions, June 1956.

Ehrlich, Isaac. "Participation in Illegitimate Activities: A Theoretical and Empirical Investigation." Journal of Political Economy Volume 81, 1973, 521-65.

----------. "The Economic Approach to Crime: A Preliminary Assessment." In Sheldon L. Messinger and Egon Bittner (eds.), Criminology Review Yearbook. Vol. 1. Beverly Hills: Sage Publications, 1979, 34-36.

Erickson, Rosemary J.; Crow, Wayman J.; Zurcher, Louis A.; and Connet, Archie V. Paroled But Not Free. New York: Behavioral, 1973.

Evans, Jr., Robert. "The Labor Market and Parole Success." Journal of Human Resources, Spring 1968.

----------. "The Released Offender in a Changing Labor Market." Industrial Relations, Volume 5 (May 1966).

Forst, Brian E. "Participation in Illegitimate Activities: Further Empirical Findings" Policy Analysis, Volume 2 (1976), 477.

Freeman, Richard B. "Crime and Unemployment," Chapter 6, in Crime and Public Policy, edited by James Q. Wilson, San Francisco: ICS Press, 1983, 89-106.

Gibbs, Jack P. "Crime, Unemployment and Status Integration." British Journal of Criminology, Volume 6 (Jan 1966), 49-58.

Gillespie, Robert. Economic Factors in Crime and Delinquency: A Critical Review of Empirical Evidence. Final Report. Washington, D.C.: National Institute of Law Enforcement and Criminal Justice, 1975 (mimeo).

Glaser, Daniel. The Effectiveness of a Prison and Parole System. New York: Bobbs-Merrill Company, Inc., 1969.

----------. "A Review of Crime-Causation Theory and Its Application." in N. Morris and M. Tonry, eds., Crime and Justice: An Annual Review, Vol. 1, Chicago: University of Chicago Press, 1979.

Glaser, Daniel and Rice, Ken. "Crime, Age, and Unemployment." American Sociological Review, Volume 24 (October 1959), 679-86.

Hannum, Robert R. "Problems of Getting Jobs for Parolees." National Probation and Parole Association Journal, Volume 6 (April 1960), 185-191.

Heineke, John M. "Economic Models of Criminal Behavior: An Overview," in Economic Models of Criminal Behavior 1 John M. Heineke, ed., 1978.

Holahan, John F. A Benefit-Cost Analysis of Project Crossroads Washington, D.C.: National Committee for Children and Youth, December 1970, p. 63.

Homant, Robert J. and Kennedy Daniel B. "Attitudes Towards Ex-Offenders." Journal of Criminal Justice. Volume 10 (1982), 383-391.

Horowitz, Robert. Back on the Street--From Prison to Poverty: The Financial Resources of Released Offenders. Washington, D.C.: American Bar Association, 1976.

Irwin, John. The Felon. Englewood Cliffs, N.J.: Prentice Hall, 1970.

Jones, Clergue T. and Kravitz, Marjorie, eds. "Strategies for Reintegrating the Ex-Offender: A Selected Bibliography." National Institute of Justice, April 1980, 49 pages.

Knox, George W. "Differential Integration and Job Retention Among Ex-Offenders." Criminology, Volume 18 (1981), 481-499.

Land, Kenneth and Felson, Marcus. "A General Framework for Building Dynamic Macro Social Indicator Models: Including an Analysis of Changes in Crime Rates and Police Expenditures, American Journal of Sociology, Volume 82 (1976), 565.

Leiberg, Leon, ed. Crime and Employment Issues. Washington, D.C. American University, 1978.

Lenihan, Kenneth J. Financial Resources of Released Prisoners. Washington, D.C.: Bureau of Social Science Research, Inc., 1974.

----------. "The Financial Condition of Released Prisoners." Crime and Delinquency, (July 1975), 266-81.

----------. Unlocking the Second Gate: The Role of Financial Assistance in Reducing Recidivism Among Ex-Prisoners. R & D Monograph 45, Employment and Training Administration, U.S. Department of Labor (Washington, D.C.: USGPO), 1977.

Letkemann, Peter. Crime as Work. NJ: Prentice-Hall, 1973.

Liker, Jeffrey K. "Wage and Status Effects of Employment on Affective Well-Being Among Ex-Felons." American Sociological Review. Volume 47 (April 1982), 264-283.

Long, Sharon K. and Witte, Ann D. "Current Economic Trends: Implications for Crime and Criminal Justice", Crime and Criminal Justice in a Declining Economy, in Kevin N. Wright, ed., Crime and Criminal Justice in a Declining Economy, Delgeschlager, Gunn and Hain Publishers Inc., Cambridge, MA, 1981.

Mallar, Charles and Thornton, Craig V. C. "Transitional Aid for Released Prisoners: Evidence From the LIFE Experiment." Human Resources. Volume 13 (1978), 208-36.

McCreary, Phyllis Groom and McCreary, John M. Job Placement and Training for Offenders and Ex-Offenders. Washington, D.C.: Law Enforcement Assistance Administration, U.S. Department of Justice, Government Printing Office, April, 1975.

McPheters, Lee R. and Stronge, William B. The Economics of Crime and Law Enforcement, Springfield, Ill: Charles C. Thomas, 1976.

Meier, D.L. and Bell, W. "Anomie and Differential Access to the Achievement of Life Goals." American Sociological Review, Volume 24 (1959), 189-208.

Meisenhelder, Thomas. "An Exploratory Study of Exiting From Criminal Careers." Criminology, Volume 15, 319-34.

Melichercik, John. "Employment Problems of Former Offenders," National Probation and Parole Association Journal, Volume 2 (January 1956), 43-50.

Merton, Robert K. "Social Structure and Anomie." American Sociological Review, Volume 3 (Oct 1938), 672-682.

Morris, Pauline. Prisoners and Their Families. London: Allen and Unwin, 1965.

National Institute of Law Enforcement and Criminal Justice, "Economic Factors in Crime and Delinquency: A Critical Review of the Empirical Evidence."

Orsagh, Thomas and Witte, Ann D. "Economic Status and Crime: Implications for Offender Rehabilitation." Journal of Criminal Law and Criminology. Volume 72 (1981), 1055-1071.

Petersilia, Joan; Greenwood, Peter W.; and Lavin, Marvin. Criminal Careers of Habitual Felons. (Santa Monica, CA, The Rand Corporation, 1977).

Pownall, George A. Empirical Problems of Released Prisoners. Manpower Administration, U.S. Department of Labor, Contract 81-19-37 with the University of Maryland, 1969.

Reitzes, Dietrich C. "The Effect of Social Environment Upon Former Felons." Journal of Criminal Law, Criminology and Police Science, Volume 46 (July-Aug 1955), 226-231.

Rossi, Peter H. "Issues in Evaluation of Human Services Delivery." Evaluation Quarterly Volume 2 (Nov. 1978), 573-599.

Rossi, Peter H.; Berk, Richard A.; and Lenihan, Kenneth J. Money, Work, and Crime: Experimental Evidence. New York: Academic Press, 1980.

Rovner-Pieczenik, Roberta. A Review of Manpower R & D Projects in the Correctional Field, (1963-1973), Manpower Research Monograph No. 28, (Washington, D.C.: U.S. Department of Labor, 1973)

Saxon, Mirriam S. Crime and Unemployment. Washington, D.C.: Congressional Research Service, Library of Congress, 1975.

Schwartz, Richard D. and Skolnick, Jerome H. "Two Studies of Legal Stigma, Social Problems, Volume 10 (Fall 1962), 133-142.

Sellin, Thorsten. "Research Memorandum on Crime in the Depression." Social Science Research Council Bulletin Vol. 27 (1937).

Sickles, Robin C.; Schmidt, Peter; and Witte, Ann D. "An Application of the Simultaneous Tobit Model: A Study of the Determinants of Criminal Recidivism." Journal of Economics and Business, Volume 31 (1979), 166.

Sjoquist, David L. "Property Crime and Economic Behavior: Some Empirical Results." American Economic Review, Volume 73 (1973), 439-446.

Smith, Charles L.; Martinez, Pablo; and Harrison, Daniel. An Assessment: The Impact of Providing Financial

Assistance to Ex-Prisoners. Huntsville, Texas: Texas Department of Corrections, 1978.

Soothill, Keith. The Prisoner's Release: A Study of the Employment of Ex-Prisoners. London: George Allen and Unwin Ltd, London School of Economics, 1974.

---------- and J. Holmes. "Finding Employment for Ex-Prisoners: A Ten-Year Follow-Up Study." Howard Journal of Penology and Crime Prevention. Volume 20 (1981), 29-36.

Stephens, Jack L. and Sanders, Lois W. Transitional Aid for Ex-Offenders: An Experimental Study in Georgia. Atlanta: Georgia Department of Offender Rehabilitation, 1978.

Sullivan, Richard F. "The Economics of Crime: An Introduction to the Literature." Crime and Delinquency, Volume 19 (April 1973), 139-149.

Sutherland, Edwin and Cressey, Donald R. Criminology 8th ed. New York: J.B. Lippincott Company, 1970.

Taggart III, Robert D. The Prison of Unemployment: Manpower Programs for Offenders. The Johns Hopkins University Press, Baltimore, 1972.

Thompson, James W.; Sviridoff, Michelle; McElroy, Jerome E.; et al. Employment and Crime: A Review of Theories and Research, U.S. Department of Justice, National Institute of Justice, October, 1981.

Toborg, Mary A.; Center, Lawrence J.; Milkman, Raymond H.; and Davis, Dennis W. The Transition From Prison to Employment: An Assessment of Community-Based Assistance Programs, National Evalation Program, Phase 1 Report, July 1978.

Tropp, Richard A. "Suggested Policy Initiatives for Employment and Crime Problems." In Crime and Employment Issures, ed., Leon Leiberg. Washington, D.C., American University, 1978.

U.S. Congress, House. Unemployment and Crime. Hearings before the Subcomittee on Crime of the Committee on the Judiciary, 95th Cong., 1st and 2nd sessions, 1978.

U.S. Congress, House. Unemployment and Crime. Hearings before the Committee on the Judiciary and the Subcommittee on Employment Opportunities of the Committee on Education and Labor, 97th Cong., 1st session, Oct. 27 and 28, 1981.

Wadycki and Balkin, "Participation in Illegitimate Activities: Forst's Model Revisited" Journal of Behavioral Economics, Volume 8 (1979), 151.

Waller, Irvin. Men Released From Prison. Toronto: University of Toronto Press, 1974.

Waldo, Gordon P. and Theodore G. Chiricos. "Work Release and Recidivism: An Empirical Evaluation of a Social Policy." Evaluation Quarterly, Volume 1 (1977), 87-108.

Wilson, Cicero ; Lenihan, Kenneth J.; and Goolkasian, Gail A. Employment Services for Ex-Offenders: Program Models. Washington, D.C., U.S. Department of Justice, National Institute of Justice, GPO, March 1981.

Witt, Leonard R. "Parole Release Without Employment." National Probation and Parole Association Journal, Volume 6, (April 1960), 170-174.

Witte, Ann Dryden. "Earnings and Jobs of Ex-Offenders--A Case Study." U.S. Department of Labor, Monthly Labor Review, (Dec 1976), 31-39.

----------. "Estimating the Economic Model of Crime With Individual Data." The Quarterly Journal of Economics (Feb 1980), 57-84.

END