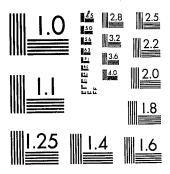
National Criminal Justice Reference Service

ncjrs

This microfiche was produced from documents received for inclusion in the NCJRS data base. Since NCJRS cannot exercise control over the physical condition of the documents submitted, the individual frame quality will vary. The resolution chart on this frame may be used to evaluate the document quality.



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

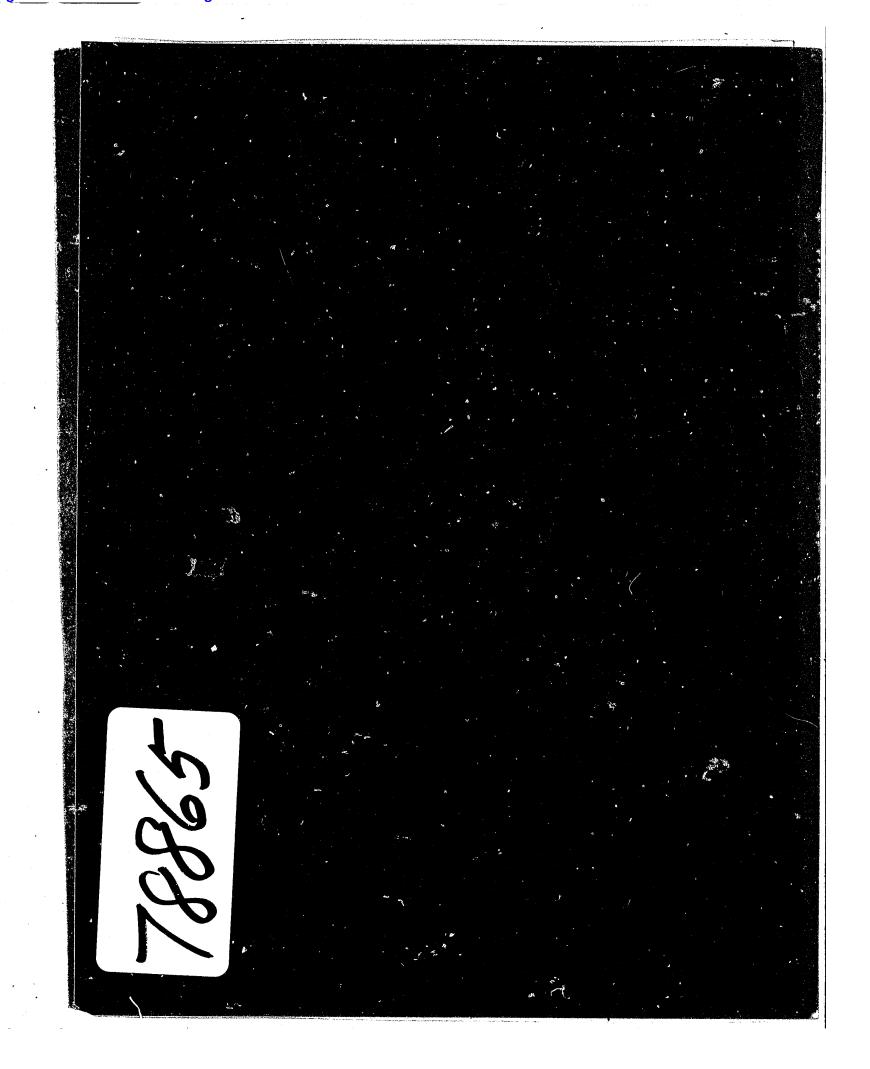
Microfilming procedures used to create this fiche comply with the standards set forth in 41CFR 101-11.504.

Points of view or opinions stated in this document are those of the author(s) and do not represent the official position or policies of the U. S. Department of Justice.

DATE FILMED

11/9/81

National Institute of Justice United States Department of Justice Washington, D. C. 20531



MANPOWER DEMONSTRATION RESEARCH CORPORATION

ANALYSIS OF NINE-MONTH INTERVIEWS

FOR SUPPORTED WORK:

RESULTS OF AN EARLY SAMPLE

78865

NGJRS

MAR 12 1981

ACQUISITIONS

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 in microfiche only has been granted by

Manpower Demonstration Research Corporation

to the National Criminal Justice Reference Service (NCJRS).

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

This report was written by:
Stan Masters with
Jean Behrens, Kathy Dickinson,
Rob Hollister, David Horner,
Valerie Leach, Rebecca Maynard,
Irving Piliavin, Felicity Skidmore,
and David Zimmerman

Mathematica Policy Research (MPR) and The Institute for Research on Poverty, University of Wisconsin

September, 1977

This report was written by Stan Masters of the Institute for Research on Poverty of the University of Wisconsin at Madison, with the assistance of Kathy Dickinson, Irving Piliavin and Felicity Skidmore of the Institute and Jean Behrens, Rob Hollister, David Horner, Valerie Leach, Rebecca Maynard and David Zimmerman of Mathematica Policy Research, as part of Mathematica's contract with the Manpower Demonstration Research Corporation to carry out major aspects of the evaluation of the national demonstration of Supported Work.

Funding for this national demonstration is derived from a number of Federal Departments, but comes through the Employment and Training Administration, U.S. Department of Labor, as the lead Federal agency under Grant No. 33-36-75-01 and Contract Nos. 30-36-75-01 and 30-34-75-02. Researchers undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Federal Government sponsors of the demonstration.

The Employment and Training Administration of the Department of Labor is the lead agency in a federal funding consortium, which includes the following additional agencies:

Law Enforcement Assistance Administration U.S. Department of Justice

Office of Planning and Evaluation
U.S. Department of Health, Education and Welfare

National Institute on Drug Abuse
U.S. Department of Health, Education and Welfare

Office of Policy Development and Research U.S. Department of Housing and Urban Development

Economic Development Administration U.S. Department of Commerce

The national demonstration is also funded by the Ford Foundation.

Copyright 1977 by Manpower Demonstation Research Corporation

BOARD OF DIRECTORS

OF THE

MANPOWER DEMONSTRATION RESEARCH CORPORATION

Eli Ginzberg, Chairman Director Conservation of Human Resources Columbia University

Robert Solow, Vice-Chairman Institute Professor Massachusetts Institute of Technology

Richard Nathan Senior Fellow Brookings Institution

Bernard E. Anderson Professor of Industry University of Pennsylvania

Anthony Downs
Senior Fellow
Brookings Institution

Alan Kistler Director of Organization and Field Services AFL-CIO

Robert Lampman
Professor
Department of Economics
University of Wisconsin

Gilbert Steiner
Director of Governmental Studies
Brookings Institution

Wayne Thompson Senior Vice-President Dayton Hudson Corporation

Phyllis A. Wallace Professor Alfred P. Sloan School of Management Massachusetts Institute of Technology

PREFACE

One of the presumed attractions of the national Supported Work demonstration is its commitment to try to answer a number of important questions about its effect on the people who participate in it: exaddicts, ex-offenders, out-of-school youth and women receiving AFDC payments. Are their earnings after program participation improved? Are their housing conditions better? Is there, for the first three groups, a reduction in criminal activity and drug use? For AFDC women, is there a reduction in the amount of welfare benefits received? What particular factors in the supported work treatment most contributed to participants' increased abilities as workers?

To answer these and other questions, a major research component was included in the original program design, and Mathematica Policy Research, Inc., of Princeton, New Jersey, working in collaboration with the Institute for Research on Poverty of the University of Wisconsin at Madison, were engaged to carry it out. Their research design is based on the use of a control group (made up of persons eligible for supported work, but assigned by lot to a non-participatory status) to which participants could be compared at given intervals. The process begins with the "base-line" interview, given to members of both the control and participating (experimental) groups at the time of assignment. Nine months later, each group is interviewed a second time, and then again, after eighteen months have elapsed. This interviewing process continues for a portion of the sample (which in its entirety will number about 6000) for a period to

Of necessity, the interview sequence lags somewhat behind the operational schedule of the program, and of course the analysis of the data collected will take considerably longer than the collection itself. So, while we are now well along in the third year of operations and while the collection of the data is complete for all baseline interviews and for many 9 and 18-month interviews, the more definitive information on effects is still about three years in the future.

In the interim, however, preliminary findings, suggesting possibilities about the program, will be made available. Analysis of the baseline interviews, for example, provided us with a clearer idea of who the program is serving: the length of time they have been out of work, the length of time they have been incarcerated or addicted, their patterns of survival, education, housing, family relationships, degree of negotiable skills and other relevant information.

This report, which analyzes the experience over nine months of approximately 700 persons, supported workers and members of the control group, is the first, and an extremely preliminary, attempt to report on the effect of supported work on its participants. It does not include any findings on AFDC participants because that group enrolled later than the other three; however, a 9-month report on the AFDC population will be completed in October. Its major foci are earnings, income from welfare payments and other sources, drug use and criminal activity (as measured by arrests and convictions.) The data base for this report is extremely small in comparison to the total research sample, and the time frame of the data collection, the first nine months of program activity, is very

limited. Nevertheless, the findings are of great interest to those of us engaged in the program's oversight. We hope they are of similar interest to other readers of this report.

William J. Grinker President

September 1977

SUMMARY

The National Demonstration of Supported Work was established to test the effects of the supported work experience on people with long histories of unemployment and resistance to traditional manpower efforts. The groups included in the demonstration are ex-addicts, ex-offenders, long term female AFDC beneficiaries and young high school dropouts, about half of whom have had a "brush with the law."

The program has several immediate and long range goals, all of which relate to improving the individual employment potential of the program's participants. Paramount among the immediate, or in-program, goals is the creation of a work atmosphere that will attract and hold members of the program's target populations. The corrollary long term, or post-program, goal of the demonstration is to prepare those same people to make a successful transition into the regular labor force. Other related and important goals are, for individual groups of participants: reduced drug use, criminal activity and dependence on welfare.

This report, the first on actual program results to be completed by the researchers at Mathematica Policy Research and the Institute for Research on Poverty of the University of Wisconsin at Madison, the research ontractors for the demonstration, presents encouraging preliminary findings on a number of in-program aims. The report covers a sample of 691 ex-addicts, ex-offenders and youth at seven program sites*--356 program participants (or "experimentals") and 335 "controls"

^{*} Jersey City, Chicago, Philadelphia, San Francisco, Oakland, Hartford and Newark.

(persons equally eligible for the program but assigned by lot to non-participant status) -- and is based on the results of an interview administered to the entire sample nine months after the experimentals enrolled in the program. Analysis of the findings shows a number of significant differences between the two groups, reflecting the early positive effect supported work had on this group of participants.

The fact that experimentals were offered employment in supported work while controls were not accounts in some part for the very wide differences between the two groups in earnings and income, but it is less axiomatic that that fact would result in the reported differences in arrest figures and alcohol use. And regardless of the implicit assist to experimentals of a supported work job, their success as a group in staying in the job offered is impressive. At time of entry into the supported work program, the sample in question had worked an average of nine weeks in the whole previous year and had earned an average of \$1000. Only 33% of the entire sample had completed 12 or more years of school; 30% had been receiving welfare in the month prior to enrollment; 58% had been incarcerated within the previous twenty-four months; 75% reported having used drugs (excluding marijuana) and 54% had at some time used heroin regularly.

This was clearly the hard-core group which supported work was supposed to serve; these early findings suggest that for a good many of them, the program is thus far working as intended.

A number of hypotheses have been postulated for the supported work demonstration, including that participants in supported work would work

more hours, earn more money, receive fewer or smaller transfer payments.

For some participants, there are additional hypotheses: that participants would use drugs less frequently, and, at least as recorded by arrest rates, be involved less often in criminal activity than their counterparts in the control group. By virtually all those measures, supported work succeeded in the first nine months.

As the following table shows, participants (experimentals) earned an average of \$3,333 in the nine month period, while controls earned \$1,298, a more than \$2000 difference. Participants worked an average of 1108 hours, or about 75% of the available working hours in the ninemonth period, as compared to the controls' 363 or about 25% of the possible hours; the average experimental group member received half the amount of welfare benefits received by the average control group member. Almost eight percent more controls than experimentals reported arrests during the period, which works out to a 26% reduction in arrests for experimentals. In the youth group, supported work resulted in an almost twenty percentage point lower incidence of drug use among experimentals.

All of these results were found to be "statistically significant" at the 95% level. Statistical significance reflects the researchers' confidence, based on statistical theory, that a measured difference between given samples is not just the result of sampling variability. To say that an experimental-control differential is statistically significant at the 95% level suggests a very high degree of confidence that the measured difference actually reflects program effects. (A more detailed explanation of statistical significance is contained in the body of the report, pages 7-11.)

viii

SELECTED EXPERIMENTAL-CONTROL DIFFERENCES DURING THE FIRST 9 MONTHS

	Experimental Group Value	Control Group Value	Experimental- Control Difference
Average Earnings during 9 months	\$3,333	\$1,298	\$2,035* <u>a</u> /
Average Hours Worked during 9 months	1,108	363	745*
Average Hourly Wages of Those with Jobs	\$2.98	\$3.58	- \$0.60*
Average Welfare Income during 9 months	\$369	\$723	-\$35 4 *
Percent Reporting Arrests	21.6	29.3	-7.7*
Percent Reporting Daily Alcohol Use	8.2	13.8	-5.6*
Percent of Youth Reporting Use of Any Drug $\underline{1}/$	14.3	33.3	-19.0*
Percent Reporting Heroin Heroin Use	22.8	22.1	0.7
Percent Reporting Cocaine Use	16.9	19.9	-3.0
Percent Reporting Illegal Income	18.1	20.1	-2.0
Average Monthly Rent	\$130	\$122	\$8

a/ Those marked with an asterisk are significant at the 95% level.

Another result found to be statistically significant was the difference in average hourly wages between the two groups. In this comparison, control group members earned more -- 60¢ -- per hour than did experimentals. Since experimental wages were fixed at 78% of the market wage to encourage partic-

ipants to transfer from Supported Work to regular employment, this finding is not surprising. (The average post-program wage of graduated supported workers at all sites is \$3.59 per hour.)

There were no statistically significant differences between controls and experimentals on drug use (except for the youth group, reported above) or illegal income, but such a difference was found for daily alcohol use, with 8.2% of experimentals reporting daily use compared to 13.8% of the controls. It is possible that the final evaluation, based on the full research sample, will show more results to be statistically significant at the 95% level than are shown in this analysis.

The report that follows presents results for five areas of substantive interest: earnings and employment, welfare income and Unemployment Insurance, housing, drug use and criminal activity (and, in Appendix C, the results of a survey of participant attitudes toward the program.) The final evaluation of the program, of which this report is simply an early indicator, will be based on data for a longer period, for a sample of over 6000, including AFDC mothers, from ten local sites.*

Manpower Demonstration Research Corporation

^{1/} Other than alcohol or marijuana.

^{*} Fifteen sites have participated in the demonstration over the past two and a half years. Management Information System (MIS) data from all fifteen will be included in the final evaluation of the demonstration, although only ten sites participated in the control group phase of the research.

TABLE OF CONTENTS

PREFACE	iv
SUMMARY	vii
LIST OF TABLES	xiv
INTRODUCTION	1
I. EXPERIMENTAL-CONTROL DIFFERENTIALS, CONFIDENCE INTERVALS, AND STATISTICAL SIGNIFICANCE	7
II. EARNINGS AND EMPLOYMENT	13
III. WELFARE PAYMENTS AND UNEMPLOYMENT INSURANCE	22
IV. HOUSING CONSUMPTION	28
V. DRUG USE	31
VI. CRIMINAL ACTIVITY	41
VII. CONCLUSION	52
APPENDIX A	53
APPENDIX B	
APPENDIX C	59
	76

LIST OF TABLES

able		Page
	PRE-ENROLLMENT CHARACTERISTICS OF THE SAMPLE	4
1		5
2	SAMPLE SIZES	
3	TOTAL EARNINGS ON ALL JOBS IN THE FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	14
4	TOTAL HOURS ON ALL JOBS IN THE FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	16
5	AVERAGE HOURLY WAGES IN FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	18
6	EARNINGS ON ALL JOBS BY SUBPERIOD, EXPERIMENTALS VERSUS CONTROLS	20
7	COMPONENTS OF INCOME IN FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	24
8	WELFARE INCOME IN THE FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	26
9	WELFARE INCOME BY 3-MONTH PERIODS, EXPERIMENTALS VERSUS CONTROLS	27
10	HOUSING RESULTS AT 9TH MONTH, EXPERIMENTALS VERSUS CONTROLS	29
11	PERCENTAGE REPORTING USE OF ANY DRUGS OTHER THAN MARIJUANA OR ALCOHOL DURING FIRST NINE MONTHS, EXPERIMENTALS VERSUS CONTROLS	33
12	PERCENTAGE REPORTING ANY HEROIN USE DURING FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	34
13	FREQUENCY OF REPORTED ALCOHOL USE DURING FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	37
14	PERCENTAGE REPORTING ANY COCAINE USE DURING FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	38
15	PERCENTAGE REPORTING OTHER DRUG USE DURING FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	40

16	PERCENTAGE ARRESTED AND NUMBER OF ARRESTS IN FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	
17	PERCENTAGE CONVICTED DUDING TOTAL	
18	THE VERSUS CONTROLS	4
70	WEEKS INCARCERATED IN FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	
19	PERCENTAGE REPORTING ILLEGAL INCOME DURING FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	
20	INCOME FROM ILLEGAL ACTIVITIES IN FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS	
A-1	DESCRIPTIONS OF INDEPENDENT VARIABLES FOR OBTAINING ADJUSTED EXPERIMENTAL-CONTROL DIFFERENTIALS	
A-2	ADJUSTED VERSUS UNADJUSTED EXPERIMENTAL-CONTROL DIFFERENTIALS: TOTAL SAMPLE RESULTS FOR ALTERNATIVE DEPENDENT VARIABLES	
B-1	REPORTED USE OF HEROIN DURING THE 9-MONTH PERIOD	
B-2	REPORTED USE OF ILLEGAL METHADONE	65
B-3	REPORTED USE OF OTHER OPIATES	66
B-4	REPORTED USE OF ALCOHOL DURING 9-MONTH PERIOD	66
B - 5	REPORTED USE OF COCAINE DURING 9-MONTH PERIOD	67
B-6	REPORTED USE OF AMPHETAMINES AND OTHER STIMULANTS DURING THE 9-MONTH PERIOD	
B - 7	REPORTED USE OF BARBITURATES AND OTHER DEPRESSANTS DUR-	71
B - 8	REPORTED USE OF PSYCHEDELICS DURING THE 9-MONTH REPLOD	71 -
3-9	REPORTED USE OF MARIJUANA DURING THE 9-MONTH PERIOD	72
3-10	DRUG TREATMENT EXPERIENCES DURING THE 9-MONTH PERIOD	72
:-1	PARTICIPANT ASSESSMENT OF MON.	74
-2	TIOM OTHER JOBS	7
	PARTICIPANT ASSESSMENTS OF THEIR SUPPORTED WORK EXPERIENCE	-
	7	0

ANALYSIS OF NINE-MONTH INTERVIEWS FOR SUPPORTED WORK: RESULTS OF AN EARLY SAMPLE

The national Supported Work demonstration and its evaluation are designed to determine the effects of work experience on individuals who have had serious and persistent difficulties in the regular job market. The demonstration is directed primarily toward four target groups: ex-addicts, ex-offenders, long-term AFDC beneficiaries, and young high-school dropouts, about half of whom have had a "brush with the law." The Supported Work concept emphasizes peer group support and graduated stress. By providing groups of disadvantaged workers with close supervision and by gradually increasing the performance standards required of them, it is hoped that such workers can be prepared for the transition to regular, unsubsidized jobs. Other important goals include reductions in drug use, criminal activity, and dependence on welfare for those who participate in the program.

A unique feature of the national Supported Work demonstration, in contrast to previous manpower projects, is that a major research and evaluation component was built into the program from the beginning. Of particular importance, the individuals eligible to participate in Supported Work are assigned randomly (that is, by chance) either to the experimental group (those given the opportunity to participate in the program—hereafter referred to as "experimentals") or to the control group (those who are not given the opportunity to participate—hereafter

^{1/}A small portion (Supported Work's Management Information System (MIS) indicates about 2 percent, the 9-month interviews suggest it may be as high as 7 percent) of the experimentals never report to the program even though they are given the opportunity to participate.

referred to as "controls").1/

Previous evaluations of employment and training programs have not had this advantage. Their conclusions have been based on comparisons with other groups of people, who have been chosen on the basis of their similarity to the participants. In the absence of random assignment, however, one can never be certain whether any differences observed reflect the true effects of the program being studied or simply reflect other unidentified differences between participants and those in the control group. 2/

Ultimately we expect to have a sample of over 6,000 persons, evenly divided between experimentals and controls, and we will follow these individuals for at least 18 months. 3/ At the present time, however, we are limited to 9 months of data for a sample of 691.4/ This sample includes three of the target groups (ex-addicts, ex-offenders, and youth) and seven of the sites (Jersey City, Chicago, Philadelphia,

San Francisco, Oakland, Hartford and Newark). 1/ The data discussed in this report are for those who enrolled near the start of the program, though not at the very beginning. 2/ All the results reported in the text are based on confidential interviews with the respondents. Some pre-enrollment characteristics of this sample are presented in Table 1. The figures in this table indicate that Supported Work is enrolling people who have had very little employment during the preceding year. Many have had considerable involvement with crime and drugs.

The precise sample sizes for each target group and site are given in Table 2. (Since the sample sizes are especially small for Oakland, Hartford, and Newark, we shall not present any results separately for these sites.) Although the sample is too small to yield very precise results, especially when broken down by target group and site, it is large enough to provide a good indication of what is happening to those who entered the program early in the demonstration. Later analyses using data from a larger sample of experimentals and controls and from post-program interviews of both groups will enable us to look at what happens to the full sample and how the results change once individuals pass the date of required termination from the program (after 12 or 18 months of program participation, depending on the site).

Sections two through six of this report focus on differences between experimentals and controls in five areas: earnings and employ-

^{1/}For a comparison between the composition of our experimental and control groups, see A Preliminary Analysis of Baseline Data Concerning Initial Enrollees in the Supported Work Sample, report prepared by Mathematica Policy Research and the Institute for Research on Poverty (New York: Manpower Demonstration Research Corporation, 1976).

^{2/}Although our random assignment procedure has been a source of irritation for some of the program operators, it does not appear to have caused any fundamental problems for them and it will be of great aid in our evaluation of the program.

^{3/}M any individuals will be followed for 27 months and some for 36 months or longer.

^{4/}The nine-month interviews analyzed in this report were assigned to the field between January 1976 and December 1976, thus our employment and earnings data cover a period beginning as early as April 1975 for some individuals and ending as late as December 1976 for others. The completion rate for the nine-month sample during that time period was 83 percer for experimentals and 78 percent for controls. For some variables, particularly earnings and arrests, we hope to be able to estimate attrition biases through the use of official records.

Later analyses will include AFDC mothers as an additional target group. Several additional sites will also be included.

^{2/}The very first participants in Supported Work (and the comparable control group members) are not included in our analyses because they received a different form of our interviews. Most of our sample entered the experimental or the control group when the program at their site was 7 to 9 months old.

TABLE 1

PRE-ENROLLMENT CHARACTERISTICS OF THE SAMPLE a

	Target Group				
Characteristic	Ex-Addict	Ex-Offender	Youth	Total	
Average age	29	26	19	26	
Percent male	82	96	91	89	
Ethnicity					
Percent black Percent Spanish Percent other	82 9 9	83 11 6	80 14 6	82 11 7	
Percent completed 12 or more years of education	39	40	3	33	
Percent married	21	14	4	15	
Average number of dependents	0.6	0.3	0.04	0.4	
Average number of weeks worked 12 month erior to enrollment (all jobs) Average earnings 12 months	11	6	11	9	
prior to enrollment (all jobs)	\$ 1389	\$ 672	\$ 867	\$ 1008	
Percent receiving welfare month prior to enrollment	40	27	11	30	
Percent living in public housing	13	16	19	15	
Percent ever used drugs <u>b</u> / (other than marijuana) <u>b</u> /	98	64	42	75	
Percent ever used heroin regularly	91	33	10	54	
Percent in drug treatment 6 months prior to enrollment	90	10	3	43	
Average number of arrests	7	10	3	8	
Average number of convictions	2	3	1	2	
Percent incarcerated during 24 months prior to enrollment	38	90	34	58	

FOOTNOTES TO TABLE 1

b/Eligibility requirements for participation in the demonstration specify a history of drug treatment for ex-addicts and of incarceration for ex-offenders. However, as is shown in this table, the sample of ex-addicts reports less than 100 percent drug use and that of ex-offenders less than 100 percent incarceration. This could reflect either that the ineligibility of certain respondents was not detected by program operators or that the respondents are inaccurately reporting their histories in these two areas.

TABLE 2

SAMPLE SIZES

		Sample Size	
Sample	Total	Experimental	Control
Total	691	356	335
Target Group			
Ex-Addicts	294	145	149
Ex-Offenders	279	148	131
Youth	118	63	55
Site			
Jersey City	225	113	112
Chicago	148	76	72
Philadelphia	138	71	67
San Francisco	83	46	37
Oakland	44	23	21
Hartford	35	17	18
Newark	18	10	8

TOTAL SAMPLE SIZES, BY SITE AND TARGET GROUP

		Target Group		
Site	Ex-Addicts	Ex-Offenders	Youth	
Jersey City	105	43	77	
Chicago	86	62		
Philadelphia	88	31	19	
San Francisco		83		
Oakland	15	29		
Hartford		13	22	
Newark		18		

ment; welfare income and Unemployment Insurance; housing; drug use; and criminal activity. There is also a brief discussion of the attitudes of the participants toward various aspects of the program included in Appendix C.

An important distinction between the various types of outcomes should be noted at the outset. The experimental-control differentials for employment and earnings are a direct result of participation in the program—we expect these differentials to result almost by definition from the treatment itself. Such results should not be confused with the results which we shall be reporting in future analyses regarding the effect of Supported Work on the <u>post-program</u> earnings of experimentals. We expect that post-program earnings differentials will reflect the degree to which Supported Work has increased its participants ability to compete more successfully in the labor market. Similarly, our results here about welfare payment differentials are largely treatment effects, since such welfare benefits are supposed to fall in proportion to any increase in earnings. The experimental-control differential in welfare payments obviously depends also on the amount of welfare being received on entry into the program.

The other topics we investigate, such as criminal activity and drug use, involve behavior that may also be affected by the program, but in a less direct way. Since we are more uncertain of these indirect effects, our investigation of them will be the more important part of this report.

Before we get into the substance of the report, however, we shall briefly explain the general statistical characteristics we shall be looking for in our results. We do this in order to provide the reader

with a framework within which to assess the importance of particular findings. Readers familiar with basic statistical conventions may skip this section.

I. Experimental-Control Differentials, Confidence Intervals, and Statistical Significance

Throughout this report we present differences between the average (mean) \(\frac{1}{2} \) values of the variables of interest for the experimental and control groups. (In a few cases, where it is more appropriate, we present percentages rather than mean values.) It is crucially important to be aware, however, that the mean values for each group and, therefore, the experimental-control differences in means, are subject to sampling variability. The sample analyzed in this report is 691 combined participants and controls. If we took another sample of similar size and calculated the mean values of the economic and social variables, we would get somewhat different means and somewhat different experimental-control differences in means. Given this sampling variability, we don't want to focus solely on the mean values in drawing conclusions which may affect policies.

Fortunately, statistical theory helps us to say something about the likely extent of the variability, which would occur if we took many samples of this size. Using information about the variability within the sample, we can estimate something called the confidence interval. The confidence interval is defined for a given

There are a variety of ways in which an average value for a sample may be calculated. The most frequently used method is to sum the values for the sample and divide this sum by the sample size. The resulting value is called the sample mean.

level, the most commonly used value being the 95% confidence level. If we repeatedly draw samples of the given size (in this case 691), in 95% of the samples the true experimental-control difference in means would fall within the range indicated by the confidence interval. $\frac{1}{2}$

Examples of experimental-control differentials and confidence intervals are given in the following table:

EXAMPLES OF EXPERIMENTAL-CONTROL

DIFFERENTIALS AND CONFIDENCE INTERVALS

Panel A
Earnings on All Jobs During First 9 Months

Mean Ear	nings	
Experimental	Control	Experimental-Control Differential
\$3,333	\$1,298	\$2,035 (\$1,708 to 2,362) a/

Panel B
Income from Illegal Activities During 9 Months

Mean In	come	
Experimental	Control	Experimental-Control Differential
\$1,476	\$3,028	-\$1,552 (-\$3,650 to 546)

Note: Panel A is drawn from Table 3, page 14, Panel B from Table 20, page 50. Please refer to those tables for more details.

a/Numbers in parentheses are the 95% confidence intervals.

In both panels, the first column gives the mean value for experimentals, the second column gives the mean value for controls, and the third column presents the experimental-control differential. Below the experimental-control differential, presented in parentheses, is the confidence interval.

9-month analysis period. The experimental-control difference in total earnings is \$2,035. The confidence interval is \$1,708 to \$2,362.

Contrast this with Panel B which reports income from illegal activities. The experimental-control differential in mean illegal income is -\$1,552. However, the confidence interval is -\$3,650 to +\$546. Thus, while many of the samples we might draw would have experimental-control differences even more negative, many would have such differentials less negative and some would have differentials which were actually positive. Since the experimental-control differential in Panel A has a much narrower confidence interval than does that in Panel B, we would be willing to put a great deal more weight on the particular experimental-control differential in Panel A than that in Panel B. Thus, by looking at both the confidence interval as well as the mean differential, we can learn about the degree of uncertainty concerning a particular experimental-control differential.

As the sample size increases, the degree of sampling variability in the means decreases. Ultimately we expect to have a sample of over 6,000 experimentals and controls. If we took repeated samples of 6,000 and calculated the means for a given variable for each sample, we would find considerably less variation from one sample mean to another than we would with samples of 691. Therefore, in subsequent analyses based on larger samples, the confidence intervals around the experimental-control

^{1/}A somewhat less stringent confidence level which is also used is the 90% level. The 90% confidence interval will be narrower than the 95% interval.

differentials will be smaller and the uncertainty concerning differences between experimentals and controls will be reduced.

Another important statistical concept, closely related to that of the confidence interval, is statistical significance. If we can be confident that an experimental-control differential is not just the result of sampling variability, then the differential is said to be statistically significant. An experimental-control differential will be statistically significant if both ends of the confidence interval are greater (or less) than zero. Results that are statistically significant at the 95% confidence level are noted with double asterisks in the tables. The \$2,035 total earnings differential in Panel A is a statistically significant result. On the other hand, the confidence interval for the illegal income differential in Panel B includes zero so that differential is not statistically significant at the 95% confidence level. Experimental-control differences that are not statistically significant will receive little discussion since they are too likely to be occurring by chance. 1/

In the report which follows, we will put considerable emphasis on whether or not a particular experimental-control differential is statistically significant. There are some counterbalancing considerations, however, which should be borne in mind when assessing the importance of our results.

First, when experimental-control differences are not statistically significant it does not necessarily mean that differences do not exist. There may be such an "experimental effect", but there may be so much variability in the measure that we cannot discern the true effect from the effect of other factors—from general "noise" in the environment. When the range of the confidence interval is large relative to the size of the experimental-control differential, there is a lot of "noise", and any experimental effect is difficult to detect with confidence (this is the case with the example from Panel B). 1

Second, an experimental-control difference may be small in magnitude even when it is statistically significant. For example, using the estimates of variability of total earnings in the population from Table 3, an experimental-control differential as small as \$400 would have been statistically significant. However, given the fact that the participation in the program necessarily raises the Supported Workers' earnings, a \$400 differential, while statistically significantly different from zero, might well be too small to make the program attractive to policymakers. Alternatively, if a differential is quite large but not significantly different from zero, a policymaker may well decide that it is worth the gamble to act upon the estimated large differential even in the face of the uncertainty.

 $[\]frac{1}{1}$ In the sections to follow, we discuss results that are significant at the 90% confidence level, even though they are not significant at the 95% level. Experimental-control differentials that are significant only at the 90% level are marked with a single asterisk.

L/Using a 95% confidence level means that 1 out of 20 samples might have the given value when the true value is zero. Thus, if we look at 20 different outcome measures it is like using the same sample in 20 different ways and we might expect at least one of these to indicate that a result was significantly different from zero even if there were no true experimental effect. Thus, chance would have us conclude that a value is significantly different from zero at the 95% level even when it is not in one out of twenty such tests. This is another limitation of the significance test.

One further point regarding the interpretation of the results should be noted. Our analysis assumes that the data are collected in a fashion that does not produce any systematic bias. Although the data on experimentals and controls will have sampling variability problems, experimentals and controls are assumed to be affected similarly by such variability, which implies that, on average, the experimental-control differential will be neither over- nor underestimated. In other words, our estimates are assumed to be unbiased. We do, however, have concerns about the possibility of bias with respect to the drug and crime measures. These concerns will be addressed in the appropriate sections.

II. Earnings and Employment

earnings of respondents. With our interview data we can examine the difference between the earnings of experimentals and controls during the 9 months since they were given the opportunity to participate in Supported Work. We would be very surprised if the earnings of the participants were not higher than those of the controls, but there may be interesting differences in the magnitude of the response by site and target group.

The earnings results are presented in Table 3.1/As expected, during the 9 months following enrollment in Supported Work, the earnings of experimentals were much larger than those of controls. In the top row of columns one and two, we see that the average earnings of the experimentals were \$3,333 compared with \$1,298 for controls.2/ The diference between the two is \$2,035, as shown in column three, 3/ and we

These earnings data are obtained from a "time line" in which we ask respondents in the experimental and control groups what they were doing during each half month since assignment to control or experimental status. For periods when they reported working, we ask about average hours worked per week and average weekly earnings (before taxes).

 $[\]frac{2}{\text{Some}}$ earnings are reported by 96% of the experimentals but by only 54% of controls. See Table 5 for more information on the percentages with jobs by site and target group.

In Appendix A we present another estimate of the experimental-control differentials, based on a regression analysis where we control for the individual's site and target group as well as for a variety of characteristics as measured in our "baseline"interviews, interviews given at the time individuals were assigned to experimental or control status. These "adjusted" experimental-control differentials are very similar to the unadjusted differentials reported in Table 3 and the other text tables. Since they provide little additional information, we have relegated them to an appendix.

TABLE 3

TOTAL EARNINGS ON ALL JOBS IN THE FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

(dollars)

	Mean Earn	ings	Experimental-Control	Program Earnings of
Sample	Experimental		Differential ^a	Experimentals
Total	3333	1298	2035** (1708 to 2362)	2698
Target Group				
Ex-Addicts	3483	1393	2090** (1494 to 2686)	2830
Ex-Offenders	3199	1217	1982** (1550 to 2414)	2440
Youth	3303	1234	2069** (1502 to 2636)	3006
Site				
Jersey City	3668	1708	1960** (1239 to 2681)	3229
Chicago	3512	1015	2497** (1866 to 3129)	2560
Philadelphia	2602	1023	1579** (1006 to 2152)	2065
San Francisco	3036	1361	1675** (934 to 2416)	2668

 $[\]frac{a}{T}$ The numbers in parentheses are 95 percent confidence intervals.

can be reasonably confident that the differential is between \$1,700 and \$2,400. The differential is accounted for primarily by earnings within Supported Work since, although experimentals have some earnings outside of the program, the average program earnings over the 9-month period were \$2,698 (or 81% of the total). Data from the 18-month interviews should be helpful in examining the more interesting question of the effect of Supported Work on post-program earnings. The results in Table 3 also indicate that there is very little difference in the results across target groups. Although there appear to be some variations in the results across sites, the variations are all within the range of sampling variability given our current sample sizes. 2/

Tables 4, 5, and 6 present additional results for earnings and employment. Results for hours worked are presented in Table 4. The

^{**}Statistically significant at the 95 percent level.

 $[\]frac{1}{T}$ The experimental effect for ex-addicts would be somewhat larger if it weren't for one person in the control group for ex-addicts who reports earnings of over \$30,000. The experimental effect for exoffenders is slightly lower than that for the other target groups. Although this difference is well within the range of sampling variability, we did find some interesting results when we looked separately at the experimental effects for those in all target groups who reported having had more than one arrest prior to their assignment to experimental or control status. For this group with more than one arrest prior to assignment, the earnings effects are \$800 less than for those reporting at most one arrest, a difference that is statistically significant at the 90% level. Since the earnings and hourly wages of controls with more than one arrest are relatively high, it looks as if the group with multiple arrests may contain a relatively large number of those who (whether because they are older, wiser, or for some other reason) are serious about finding jobs. Despite the handicap of having a criminal record, many such workers may in fact be able to command unsubsidized jobs with reasonable wages, if they want to work.

^{2/}In Philadelphia, however, both experimental earnings and the differential between experimentals and controls are lower than elsewhere. Table 3 also reveals that the program earnings of experimentals in Philadelphia are lower than in the other sites, and this is consistent with evidence from program data that the average length of program participation in Philadelphia is relatively short.

TABLE 4

TOTAL HOURS ON ALL JOBS IN THE FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

Sample	Mean Hou Experimental	rs Control	Experimental-Control Differential	Program Hours of Experimentals
Total ^a /	1108	363	745** (669 to 821)	954
Target Group				
Ex-Addicts	1136	331	805** (689 to 921)	981
Ex-Offenders	1053	371	682** (560 to 804)	869
Youth	1174	429	745** (569 to 921)	1092
<u>Site</u>				
Jersey City	1253	424	829** (694 to 964)	1149
Chicago	1145	316	829** (6,73 to 985)	931
Philadelphia	864	315	549** (379 to 719)	716
San Francisco	1010	358	652** (443 to 861)	924

 $[\]frac{a}{D}$ Due to missing data the total sample size is 690.

average experimental worked 1108 hours over the nine months, which comes to about 123 hours per month or about 28 hours per week, while controls worked about one-third as much. The pattern of results across target groups and sites is roughly comparable to that for earnings.

There are other productive uses of time, of course, including schooling and training. Since experimentals already have a job with the program, we might expect them to be less likely than controls to pursue schooling or training during this period. Our results, however, do not indicate any statistically significant differences in the percentages of experimentals and controls who received training or schooling during the 9-month period. We should note that the incidence of training or schooling is low; only 9% of our respondents reported schooling during the period and only 8% reported training.

Table 5 presents average hourly wages for those who had a job at some time during the 9-month period. The wage rate for Supported Work was set so that it would be below our estimate of the market wage rate in an effort (1) to encourage transition out of the program for those who could find (and hold) unsubsidized jobs and (2) to discourage those without significant labor market problems from applying for the program in the first place. Therefore, we expect to find that experimentals have lower hourly wages than controls since the results for the 9-month period are dominated by the Supported Work jobs.

The results in Table 5 confirm our expectations. Experimentals

b/The numbers in parentheses are 95 percent confidence intervals.

^{**}Statistically significant at the 95 percent level.

An hypothesis about the longer-term effects of Supported Work is that for the youth target group relatively more experimentals than controls will return to school or enroll in training programs after participating in the program.

TABLE 5

AVERAGE HOURLY WAGES IN FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

(dollars per hour)

	Percen with J	obs	Mean Wage Those With		Experimental- Control Differentialin
Sample	Experimental	Control	Experimental	Control	Differentialin Mean Wage
<u>Total</u>	96% <u>b</u> /	54%	\$2.98	\$3.58	\$60** (94 to26
Target Group					
Ex-Addicts	95	47	3.06	4.01	95** (-1.66 to 1.24)
Ex-Offenders	97	57	3.00	3.43	43** (80 to06)
Youth	100	64	2.78	3.04	26 (86 to .34)
Site					
Jersey City	98	58	2.91	3.82	91** (-1.63 to -19)
Chicago	100	49	2.94	3.17	23* (49 to .03)
Philadelphia	94	43	3.04	3.54	50 (-1.45 to .45)
San Francisco	98	59	3.02	3.90	88** (-1.50 to26)

 $[\]frac{a}{The}$ numbers in parentheses are 95 percent confidence intervals.

did have significantly lower average hourly wages than those controls who held jobs during the 9-month period. 1/ This negative experimental effect was also statistically significant for the ex-addict and ex-offender target groups individually. The differential is largest for ex-addicts, a group that may include some people with very marketable skills (as indicated by the relatively high average hourly wage of the control group). 2/ The differential is lowest for youth, where few have yet developed such skills.

Table 6 shows results for earnings by three-month subperiods and for the last month of the 9-month period. We expect the experimental effects to be largest at the start and to fade over time as (1) controls have more opportunities to find jobs and (2) some experimentals become disenchanted with Supported Work--or vice versa. The results in Table 6 are consistent with this view. Although the experimental-control differential is significant in all three subperiods, the differential generally decreases as we move from the first subperiod to the last one. Table 6 also shows that, even in the last month of our 9-month period, 45% of the experimentals were still in the program and program earnings accounted

 $b/_{\text{Twelve}}$ of our sample of 356 experiments never reported for their Supported Work jobs.

^{*}Statistically significant at the 90 percent level.

^{**}Statistically significant at the 95 percent level.

^{1/}Many of our controls have not held a job during this period and are consequently not included in our analysis of average hourly wages. This probably means that the differentials between experimentals and controls at least in part reflect selectivity biases not present in our analysis using the total sample, where we can rely on random assignment to remove the selectivity bias.

This result still holds if we eliminate the very small number of cases where the individual's hourly wage is suspiciously high. If we reduce all higher wages to \$10 per hour, the experimental effect for ex-addicts drops to \$0.74 while the differential for ex-offenders and youth is unaffected. The experimental effect for Jersey City also falls to \$0.68.

^{3/}We also expect the most recent data to be the most accurate.

^{4/}An analysis of MIS data for a somewhat different sample indicates that about 40% of the experimentals were still in the program after 9 months.

TABLE 6

Time Period	Mean Earni Experimental	.ngs Control	Experimental-Control Differentiala/	Program Earnings of Experimentals	Experimentals b/ Still in Program
9 Months	3333	1298	2035** (1708 to 2362)	2698	90.5%
First 3 months	1243	336	907** (803 to 1011)	1145	90.5%
Second 3 months	1105	485	620** (489 to 751)	860	68.3%
Third 3 months	982	477	505** (368 to 642)	691	53.2%
9th month earnings	320	-141	179** (132 to 226)	215	44.8%

 $[\]frac{a}{m}$ The numbers in parentheses are 95 percent confidence intervals.

20

 $[\]frac{b}{}$ These percentages represent those respondents who reported to us that they received earnings from Supported Work.

^{**}Statistically significant at the 95 percent level.

for over two-thirds of the total earnings of experimentals. 1/ It is, thus, still much too early to say anything about the effects of Supported Work on post-program earnings. 2/

We would expect that, other things being equal, the Wildcat percentage differential would have been lower, since the Wildcat results are for a longer period of time and more participants would therefore have left the program. In fact, however, Wildcat participants on average stayed in the program longer than do Supported Workers. Wildcat found that 43% of the participants were still in that program after one year, while the initial findings for Supported Work reveal that only 28% of the participants stayed for as long as a year. (The Wildcat figure comes from the Second Annual Research Report on Supported Work, the Supported Work figure from the Summary Report on Selected Data from the Supported Work Management Information System, Judith Wooldridge, MDRC, March 1977.) This difference probably results in large part from the absence of a termination requirement in Wildcat, whereas Supported Work requires termination after 12 months at some sites and after 18 months at others.

2/ About two-thirds of the experimentals had left the program at some time during the nine month period. About one-third of this group reported having worked at "regular" (non-Supported Work) jobs, where regular jobs are defined as those lasting at least one month and averaging at least 20 hours per week. Almost half of the controls reported such jobs. About 20% of the experimentals who held jobs other than Supported Work in the nine month period reported that their jobs were with state or local governments; furthermore, a quarter of those jobs were reported to be part of special government programs, such as WIN or CETA. The corresponding figures for controls are 18% reporting state or local government jobs, of which a third are reported to be with special government programs.

^{1/} Table 6 can also help us in comparing our findings with those of Wildcat — the program developed in New York City by the Vera Institute of Justice, which has served as the pilot for the national Supported Work demonstration. Wildcat found, on the basis of a sample size of slightly under 200, that during the first 12 months their experimentals earned an average of \$4,460 while control group members earned \$1,112. (Wildcat: The First Two Years. The Second Annual Research Report on Supported Work, The Vera Institute of Justice, November 1974.) The Wildcat experimental-control differential is larger, both in absolute and percentage terms (in relation to control group earnings), than the one we found.

III. Welfare Payments and Unemployment Insurance

In addition to the effect of Supported Work on earnings, we are interested in the effect on unearned income. Supported Work is expected to affect the amount of work-conditioned transfer payments—mainly welfare and Unemployment Insurance (UI)—the participants receive. This will certainly be true while Supported Workers are still in the program. It should also be true after they leave, if the program has the anticipated positive effect on post-program employment.

This report presents experimental-control differences in welfare income and UI. Other types of income received by those in our sample and the incomes of other persons in their households were also investigated. But since experimental-control differences were small and not statistically significant, 2/ they will not be discussed here.

Analysis of work-conditioned transfer payments is important since any reduction in such payments is an effect of Supported Work which should be taken into account when calculating the net cost of the program. Thus, in addition to other benefits—such as the product produced by Supported Workers and any program—induced reduction in losses due to

crime--decreases in welfare payments and UI must be taken into account in assessing the payoff of Supported Work.

Welfare income and UI are analyzed separately because the pattern of receipt of these two types of income is expected to differ over the course of and following participation in the program. Welfare is generally received because the recipient is not employed; it does not depend on previous employment. Thus, for controls we expect welfare income to be highest at the point of intake and to fall gradually to the extent that the controls are able to gain employment. Experimentals are expected to have an immediate drop in welfare income at intake into Supported Work. Unemployment Insurance, in contrast, is based on work experience over the past one or two years. Since most individuals in the sample have not been employed in the period preceding enrollment into the Supported Work sample, the pattern of UI receipt is expected to be low initially but might rise for experimentals if they become eligible for UI following their termination from Supported Work. 1/

Table 7 presents results for welfare and other income. This includes receipt of General Assistance, AFDC, Food Stamp bonuses, and other unspecified welfare payments. 2/UI payments are reported separately. The controls did have significantly more welfare payments than the experimentals. The total differential is \$354 for the nine-month period, or about \$40

Work-conditioned transfers are government benefits whose size depends on work activity and/or level of income. We expect reductions in welfare to be especially important for the AFDC target group, which will be included in later analysis but is not included in this initial sample.

²/The average work-conditioned income of other household members for experimentals and controls, respectively, was \$338 and \$353--a difference of \$15 with a confidence interval between -\$83 and +\$53.

^{1/} Regular UI has been purposely excluded from the Supported Work benefit package. Former participants may be able to obtain supplemental UI benefits, however, under the federally funded Supplemental Unemployment Assistance (SUA) program.

^{2/} We asked respondents how much of each type welfare they (and their spouses and children) received for each month since enrollment in the sample. The "other" category is small, and we suspect consists mostly of general assistance or AFDC payments which were not identified appropriately in the responses.

TABLE 7

COMPONENTS OF INCOME IN FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS (dollars)

		Percenta with Such I	ncome	Experimental -Control Differential in Percentage with Such Incomea/	Mean Incom Total Sam Experimental	e of pleb/ Control	Experimental -Control Differential in Mean Income
_	Component	Experimental	Control	10.6**	3781	2170	1611**
T	otal Legal Income	97.2	86.6	(8.7 to 12.5)			(1276 to 1946)
E	arnings	96.4	53.7	42.7** (39.8 to 45.6)	3333	1298	2035** (1708 to 2362)
V	Welfare Income	41.0	58.8	-17.8** (-21.6 to -14.0)	369	723	-354** (-493 to -215)
	General Assistance	13.8	29.6	-15.8** (-18.9 to -12.7)	130	283	-153** (-227 to -79)
	AFDC	5.9	10.5	-4.6** (-6.8 to -2.4)	104	245	-141** (-242 to -30)
	Other Welfare	1.4	2.4	-1.0* (-2.1 to 0.1)	8	21	-13 (-32 to 6)
	Bonus Value of Food	35.1	44.8	-9.7** (-13.5 to -5.9)	124	173	-49** (-87 to -11)
•	Stamps Unemployment Insurance	e 2.3	4.8	-2.5** (-4.3 to -0.7)	19	80	-61** (-109 to -13)

NOTE: The sample sizes range from 681 to 691.

 $a/_{\text{The numbers in parentheses}}$ are 95 percent confidence intervals.

^{*}Statistically significant at the 90 percent level.

^{**}Statistically significant at the 95 percent level.

b/These means include those with zero values.

per month. $\frac{1}{}$ Most of this differential comes from General Assistance and AFDC. In addition to the welfare differential, experimentals receive an average of \$60 less in UI payments.

Results for total welfare income are presented by target group and site in Table 8 and by time period in Table 9. The experimental—control differential in work-conditioned transfer payments varies somewhat by target group and site. In particular, the differential is somewhat lower for youth and higher for ex-addicts. 2/ There is very little differential by time period.

^{1/}This differential is for the total sample, including zero values for those with no welfare income. To obtain the mean welfare income of those with such income, divide the means in Table 7 by the proportion reporting any of that kind of income.

^{2/}Our results for ex-addicts are smaller than Wildcat's because New York State had welfare policies that were generous for ex-addicts at the time the Wildcat data were collected and because being on welfare was an eligibility requirement for Wildcat. In our sample the greatest experimental effect for ex-addicts is in the AFDC component of welfare.

TABLE 8

WELFARE INCOME IN THE FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

(dollars)

	Mean Inc	come	Experimental-Control	
Sample	Experimental	Control	Differential ^D /	
Total ^{a/}	369	723	-354** (-493 to -215)	
Target Group				
Ex-Addicts	554	1067	-513** (-786 to -240)	
Ex-Offenders	238	501	-263** (-410 to -113)	
Youth	247	323	- 76 (-242 to 90)	
<u>Site</u>				
Jersey City	240	467	-227** (-426 to -28)	
Chicago	577	993	-416 ** (-801 to -31)	
Philadelphia	565	1105	-540 ** (-906 to -176)	
San Francisco	290	358	- 68 (-286 to 150)	

 $[\]frac{a}{D}$ Due to missing data the total sample is 687.

TABLE 9

WELFARE INCOME BY 3-MONTH PERIODS,

EXPERIMENTALS VERSUS CONTROLS

(dollars)

Period	Mean In	Mean Income			
	Experimental	Control	Experimental-Control Differential		
9 Months	369	723	-354**		
First 3 Months	126	251	(-493 to -215) -126** (-174 to -78)		
Second 3 Months	120	242	-122** (-169 to -75)		
Third 3 Months	123	229	-106** (-151 to -61)		

 $[\]underline{a}$ The numbers in parentheses are 95 percent confidence intervals.

 $[\]underline{b}$ /The numbers in parentheses are 95 percent confidence intervals.

^{**}Statistically significant at the 95 percent level.

^{**}Statistically significant at the 95 percent level.

IV. Housing Consumption

Because of their steadier income, experimentals may obtain better housing than controls. Unfortunately, to test this hypothesis is not a simple matter.

The first housing measure we examine is home ownership.

Because of their generally low and variable incomes, we expect little home ownership among members of our sample. Supported Work does provide a new income opportunity, but we do not expect its short-run effect to be large enough to show up in any appreciable increase in home ownership among experimentals. As Table 10 indicates, home ownership is virtually nonexistent for both experimentals and controls.

For experimentals who rent their housing, we expect an increase in rental price for two reasons: (1) experimentals may choose to spend more for better housing, and (2) those who live in income-conditioned subsidized housing should pay more rent for the same premises as their incomes increase. 1/The rents for experimentals were, on average, \$8 per month higher than those for controls, a difference which is significant at the 90% level. One reason for this difference is that public housing rents rose substantially more for experimentals. While this does not represent any benefit to the experimentals in the form of better housing, it does mean that experimentals' housing is less subsidized.

TABLE 10
HOUSING RESULTS AT 9TH MONTH, EXPERIMENTALS VERSUS CONTROLS

	Experimental	Control	Experimental-Contro Differential
Homeownership (percentage)	0.6	1.2	-0.6 (-1.9 to .7)
Rent for those who rent (\$ per month)	130	122	8.0* (-1.1 to 17.1)
Rooms per Person	1.4	1.5	-0.1 (4 to .2)
Rooms	4.5	4.8	-0.3 (7 to .1)
Household Size	3.8	4.1	-0.3 (-0.7 to .1)

NOTE: Sample sizes range from 464 to 565. Persons living in institutions and halfway houses were excluded.

^{1/}Despite their higher income, however, experimentals did not appear to be moving out of public housing more frequently than controls.

 $[\]underline{\underline{a}}$ The numbers in parentheses are 95 percent confidence intervals.

^{*}Statistically significant at the 90 percent level.

Another indication of housing quality is the number of rooms available per person in the household. Experimentals have somewhat fewer rooms per person but the difference is not at all statistically significant. Furthermore, this sample does not seem to be characterized by crowded housing conditions.

V. Drug Use

The Supported Work program might affect the use of drugs through several mechanisms, most of which could reduce drug usage. By providing reinforcement for work, the program may make it easier for the ex-addict to change patterns of behavior established during periods of addiction. The peer support provided by Supported Work may be particularly important, since the use of drugs appears to have strong social components. Graduated stress may also ease the transition to a working lifestyle. On the one hand, by increasing the employment opportunities of a participant, Supported Work makes it relatively more expensive for him to use drugs so extensively that his work performance is affected. On the other hand, the extra income a participant earns enables him to spend more on drugs than he could previously, possibly resulting in heavier drug use or a shift to more expensive drugs. 1/

The data on drug usage which we analyze in this section are based on the respondents' own reports of their drug usage. There are reasons to be concerned that this information has a potentially higher risk of being misreported or biased than the types of data we have discussed up to this point. In particular, respondents may underreport their drug usage because they fear that full reporting will get them in trouble with employers or police. Respondents have been informed that

We are assuming here that the extra legal income of experimentals is not counterbalanced by their obtaining much less illegal income. For some results on illegal income see Table 20, p.50.

their reports to us are confidential and legally protected from disclosure, but these assurances may not be sufficient to overcome their wariness in discussing such behavior.

We begin our discussion of drug use with an analysis of those who report ever using any of the following drugs during the nine-month period: 2/ heroin, other opiates, illegal methadone, barbiturates, amphetamines, and psychedelics. As the results in Table 11 indicate, supported Work does increase the percentage of youths who report no use of drugs during the nine-month experimental period. This result is statistically significant. There are, however, no statistically significant experimental effects for the ex-addicts or ex-offender groups.

Next we look at the use of each individual drug. Heroin is particularly interesting because of the physiological dependence and tolerance associated with its use and the reports in the literature of particularly high recidivism rates after participation in drug-use treatment programs. Furthermore, heroin had been used by many of our sample members prior to the beginning of the program. Table 12 presents the experimental-control differentials in the reporting of heroin use at any time during the 9-month period.

PERCENTAGE REPORTING USE OF ANY DRUGS OTHER THAN MARIJUANA

OR ALCOHOL DURING FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

Sample	Experimental	Control	Experimental-Control Differential ^a
rotal .	36.8	39.1	-2.3 (-9.6 to 5.0)
Target Group			
Ex-addicts	44.1	39.2	4.9 ' (-6.3 to 16.1)
Ex-offenders	39.2	41.1	-1.9 (-11.9 to 8.1)
Youth	14.3	33.3	-19.0** (-34.1 to -3.9)
Site			
Jersey City	34.5	36.9	-2.4 (-14.7 to 9.9)
Chicago	28.9	25.3	3.6 (-10.7 to 17.9)
Philadelphia	36.6	47.8	-11.2 (-27.9 to 5.5)
San Francisco	56.5	54.0	2.5 (-19.8 to 24.8)

Note: The drugs included are heroin, other opiates, illegal methadone, barbiturates, amphetamines, and psychedelics.

 $[\]frac{1}{This}$ issue is discussed more fully in Appendix B. As that discussion indicates, we have little evidence of misreporting.

 $^{2/}_{\rm Results}$ for other dimensions of drug use are presented in Appendix B.

 $[\]frac{3}{\text{At}}$ the time they were assigned to experimental or control groups, 62% of our respondents reported prior use of heroin.

 $[\]frac{a}{T}$ The numbers in parenthesis are 95 percent confidence intervals.

^{**}Statistically significant at the 95 percent level.

TABLE 12

PERCENTAGE REPORTING ANY HEROIN USE DURING FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

Sample	Experimental	Control	Experimental-Control Differential
Total ^a /	22.8	22.1	.7 (- 6.2 to 7.6)
Target Group			
Ex-Addicts	30.3	25.0	5.3 (- 4.9 to 15.5)
Ex-Offenders	20.3	22.7	-2.4 (-12.2 to 7.4)
Youth	11.1	13.0	-1.9 (-14.2 to 10.4)
Site			
Jersey City	20.4	13.5	6.9 (- 3.0 to 16.8)
Chicago	14.5	15.5	-1.0 (-12.5 to 10.5)
Philadelphia	29.6	38.8	-9.2 (-25.0 to 6.6)
San Francisco	30.4	24.3	6.1 (-13.2 to 25.4)

 $[\]frac{a}{D}$ Due to missing data the total sample is 686.

The results suggest that, for this sample, Supported Work has little overall effect on the use of heroin. A few more experimentals than controls reported periods of heroin use since the month of assignment, but this difference is very small and not significant. There were also no significant differences in the duration of heroin use for those using the drug. $\frac{1}{2}$ Nor were there such differences in the use of drug treatment programs. $\frac{2}{2}$

The experimental results may vary by target group and by site. For example, the program may have a different effect on recidivism in drug use among ex-addicts than on the initiation to drug use among youth. We do not have strong expectations as to the size or direction of the Supported Work effect for the various target groups. It is possible, for instance, either that placing youths in a work situation with ex-addicts could increase their drug usage or that providing a work alternative to youths at a time when the risk of initiating drug use is high will be quite effective in reducing usage. Sites might also be expected to differ from one another in their effects on heroin use, either because they implement Supported Work differently or because they recruit workers from different populations. We found, however, no significant experimental-control differences in the various target

 $[\]frac{b}{T}$ The numbers in parentheses are 95 percent confidence intervals.

^{2/} See Table B-2 of Appendix B. Other dimensions of the extent of use are dosage and frequency. For the 9-month questionnaire, these measures are only available for those reporting current use. Although there is no difference in dosage, experimentals do report less current use. Very few of our sample report any current use, however, and the experimental-control differential is not statistically significant. In subsequent questionnaires, the dosage and frequency questions will be asked of all those reporting any drug use during the period.

^{2/} See Table B-10. There are some differences reported between experimentals and controls, however, in the percent in drug treatment at the conclusion of the 9-month period.

groups and sites. $\frac{1}{}$

Many former heroin users may use alcohol in large quantities while remaining abstinent from heroin. Thus, if Supported Work does lead to reduced use of heroin, it may eventually result in increased use of alcohol. It may, in contrast, reduce alcohol use for the same reasons that we expect it to reduce drug use. Table 13 presents the reported frequency of alcohol use during the nine-month period. We found that significantly fewer experimentals than controls reported daily or near daily use of alcohol. 2/

Cocaine was also used by many of our sample members prior to the program, and has been used about as extensively as heroin since the month of assignment. Cocaine is a rather expensive "luxury" drug. Those with a strong desire to use drugs but to remain off heroin might use cocaine if they had sufficient income. Table 14 indicates that, overall, the reported use of cocaine by experimentals and controls was not significantly different. However, among those in the youth target group, experimentals reported significantly less cocaine use than controls. By site, experimentals reported using significantly more

TABLE 13

FREQUENCY OF REPORTED ALCOHOL USE DURING FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

Frequency	Experimental	Control	Experimental-Control
Drinks alcohol everyday or nearly everyday	8.2%	13.8%	-5.6** (-10.4 to -0.8)
Drinks a few times a week	33.9	30.8	3.1 (- 3.9 to 10.1)
Drinks a few times a month	10.2	14.4	-4.2* (- 9.2 to 0.8)
Drinks less often than above	17.9	15.9	2.0 (- 3.7 to 7.7)
Did not drink alcohol during nine months	29.8	25.1	4.7 (- 1.9 to 11.3)
Total	100.0%	100.0%	

 $[\]underline{a}/_{\text{The numbers in parentheses}}$ are 95 percent confidence intervals.

When we compare our results for the ex-addict groups to those for ex-addicts in the Wildcat program we find our reported usage of heroin to be much larger for both experimentals and controls—a result that is not surprising since many in Wildcat were on methadone maintenance. The Wildcat results showed sizable reductions for experimentals initially, though none in later analysis.

 $[\]frac{2}{\text{These}}$ results are similar to those for Wildcat which showed a decrease in the number of experimentals drinking daily by the fourth quarter of the second year.

^{*}Statistically significant at the 90 percent level.

^{**}Statistically significant at the 95 percent level.

TABLE 14

PERCENTAGE REPORTING ANY COCAINE USE DURING FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

Sample	Experimental	Control	Experimental-Control Differential
Total	16.9	19.9	-3.0 (- 8.7 to 2.7)
Target Group			
Ex-Addicts	18.6	14.8	3.8 (- 4.6 to 12.2)
Ex-Offenders	19.6	25.8	-6.2 (-16.1 to 3.7)
Youth	6.4	20.4	-14.0** (-26.0 to -2.0)
Site			
Jersey City	15.9	25.2	-9.3* (-19.8 to 1.2)
Chicago	14.5	4.2	10.3** (0.9 to 19.7)
Philadelphia	9.9	13.4	-3.5 (-14.1 to 7.1)
San Francisco	23.9	40.5	-16.6 * (-36.6 to 3.4)

a/The numbers in parentheses are 95 percent confidence intervals.

cocaine than controls in Chicago, while experimentals reported using less in Jersey City and San Francisco. $\frac{1}{2}$

Results for the use of drugs other than heroin, cocaine and alcohol are presented in Table 15. We find that experimentals use more illegal methadone than controls. It may be that some experimentals who are addicted to opiates prefer to use the longer-lasting methadone so they can work all day without taking drugs on the job. 2/ The only other drugs where we have much reported use are other opiates and marijuana, and in both cases there are no significant differences between experimentals and controls. Although there is little use of barbiturates, amphetamines and psychedelics reported, experimentals are apparently using psychedelics significantly less than controls. We did not expect that the one statistically significant result for overall usage would be this drug category.

^{*}Statistically significant at the 90 percent level.

^{**}Statistically significant at the 95 percent level.

^{1/} The differentials in Jersey City and San Francisco are statistically significant at the 90% level, but not at the 95% level.

^{2/} Methadone's longer-lasting effect—as compared with heroin and other opiates—minimizes the frequency of use necessary to fore-stall withdrawal symptoms. Together with its oral administration (as opposed to injection) and allegedly inferior euphoric effects, the long-acting character of methadone also facilitates its use at dosages below the active heroin user's "normal" tolerance, thus providing the user with means of self-administered, partial "detoxification." There is some evidence from previous studies that illicit methadone in conjunction with legitimate employment provides an effective strategy for heroin users who seek to "manage", or periodically reduce, their heroin tolerance.

TABLE 15

PERCENTAGE REPORTING OTHER DRUG USE DURING FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

Drug	Experimental	Control	Experimental-Control Differentiala/		
Illegal methadone	4.0	2.1	1.9 (- 0.6 to 4.4)		
Opiates other than heroin	9.0	11.1	-2.1 (- 6.6 to 2.4)		
Marijuana	62.8	66.0	-3.2 (-10.5 to 4.1)		
Barbiturates	5.1	5.1	0.0 (- 3.3 to 3.3)		
Amphetamines	3.1	3.9	-0.8 (- 3.6 to 2.0)		
Psychedelics	0.6	3.3	-2.7** (- 4.7 to -0.7)		

Note: Due to missing data the sample sizes range from 678 to 690.

VI. Criminal Activity

Another area in which Supported Work may have important effects is criminal activity. Fear of crime exists among many, especially in large cities, so any reductions in crime as a result of the program should be of considerable interest. The costs of crime, moreover, are high even if we focus only on those components that can be more easily measured (such as the costs of the criminal justice system).

Supported Work may lead to reduced criminal activity for several reasons. First, Supported Work enables experimentals to earn more legal income than controls, thereby increasing the relative rewards of pursuing legal as opposed to illegal income. Since this opportunity to earn legal income will be lost if the participant pursues criminal activities and ends up in jail, Supported Work also increases the cost of criminal activities. Finally, the program work environment (e.g., peer group support and graduated stress) is designed to change attitudes towards crime by making regular employment relatively more attractive.

As in the case of drugs, the data analyzed in this report on criminal activity and associated arrests, convictions or incarcerations are based on self-reports by respondents. In spite of the assurance of confidentiality, respondents may fear that their self-reports on criminal activity may somehow be used to their

 $[\]frac{a}{T}$ The numbers in parentheses are 95 percent confidence intervals.

^{**}Statistically significant at the 95 percent level.

disadvantage. Such fears could lead to greater underreporting for experimentals than for controls due to the experimentals' concerns about losing their Supported Work jobs. For certain groups, on the other hand, ability to engage in criminal activity is taken as a sign of toughness and skill. Thus, some respondents may inflate their reports of criminal activity.

The degree of potential misreporting could vary with the measure of criminal activity under consideration. Below we report on analyses of respondents' self-reports of arrests, convictions, length of incarceration and illegal income. Respondents may be less inclined to misreport arrests, convictions or incarcerations than illegal income since the former are matters of official record, although past experience with employment interviews and the like may have conditioned respondents habitually to underreport such facts. Eventually, we will be able to check on the extent of error in arrests and, perhaps, in convictions and incarcerations, through sampling of official records at a few of the sites. 1/

The first measure of criminal activity we shall look at is number of arrests. Table 16 presents results for the percentages of experimentals and controls who were arrested and the number of arrests during the 9-month period. Significantly fewer experimentals than controls were arrested during this period. Although experimental-control

^{1/}We are currently in the process of validating our arrests data with official records at some sites. The only results currently available are for a small sample at Hartford. Although we find substantial underreporting, we do not find experimentals and controls underreporting differentially from one another.

TABLE 16 PERCENTAGE ARRESTED AND NUMBER OF ARRESTS IN FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS

	Percentage A		Experimental-Control Differential in	Mean Number Arrests for Sample Experimental	Total	Experimental-Control Differential in Mean Number of Arrestsb/
Sample	Experimental	Control	Percentage Arrestedb/	Experimentar		
Total a/	21.6	29.3	-7.7 ** (-14.2 to -1.2)	.309	.386	077 (183 to .029)
Target Group						
Ex-Addicts	16.6	22.2	-5.6 (-14.6 to 3.4)	.200	.289	089 (216 to .038)
Ex-Offenders	27.0	40.0	-13.0** (-24.2 to -1.8)	.446	.531	085 (288 to .118)
Youth	20.6	23.6	-3.0 (-18.1 to 12.1)	.238	.309	071 (273 to .131)
Site						
Jersey City	21.2	27.7	-6.5 (-17.9 to 4.9)	.327	.348	021 (200 to .158)
Chicago	15.8	26.4	-10.6 (-23.7 to 2.5)	.171	.264	093 (231 to .045)
Philadelphia	21.1	23.9	-2.8 (-19.8 to 11.7)	.268	.433	165 (439 to .109)
San Francisco	23.9	40.5	-16.6* (-37.0 to 3.8)	.370	.514	144 (488 to .200)

Due to missing data the total sample is 690.

 $[\]frac{b}{The}$ numbers in parentheses are 95 percent confidence intervals.

These means include those with zero values.

^{*}Statistically significant at the 90 percent level.

^{**}Statistically significant at the 95 percent level.

differences in the average number of arrests were not significantly different at the 95% level, there was a consistent pattern of fewer experimental arrests in all target groups and in all sites. 2/

Tables 17 and 18 present two other crime-related variables, percentage convicted and length of time incarcerated. Although arrests are the most frequently used measure of criminal activity, they are not a perfect measure. To the extent that crimes remain undetected, arrests will produce an underestimate of crime. To the extent that they do not result in convictions, they may produce an overestimate. To guard against the latter bias we need to look at conviction data as well. Unfortunately, there is not a great deal to be said about the conviction results since only a very small percentage of either experimentals or controls report a conviction during the 9-month period. In addition, many of the convictions reported during this period may be the result of arrests prior to enrollment in the sample. In any event, there are no statistically significant experimental effects to report.

Another measure of criminal activity presented in this report is length of time incarcerated. Sentences received by convicted offenders reflect in part the seriousness of the crimes they have been found guilty of (and presumably the crimes they have committed).

TABLE 17

PERCENTAGE CONVICTED DURING FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

Sample	Experimental	Control	Experimental-Control
Total ^a /	10.1	9.6	0.5 (- 3.4 to 4.4)
Target Group			
Ex-Addicts	8.3	5.4	2.9 (- 2.8 to 8.6)
Ex-Offenders	10.9	15.4	-4.5 (-14.2 to 5.2)
Youth	12.7	7.3	5.4 (-16.2 to 5.4)
ite			
Jersey City	11.6	5.4	6.2 (- 1.0 to 13.4)
Chicago	2.6	8.3	-5.7 (-14.3 to 2.9)
Philadelphia	7.0	6.0	-1.0 (- 8.8 to 6.8)
San Francisco	10.9	21.6	-10.7 (-26.3 to 5.4)

Due to missing data the total sample is 689. The results are for the total sample and not just for those arrested.

^{1/}These averages include zeroes for those with no arrests. To obtain the mean number of arrests for those with arrests, divide the means in Table 16 by the proportion having any arrests.

^{2/}The difference in the mean number of arrests is roughly equivalent to Wildcat's result. The 9-month Supported Work differential (experimental-control difference as a percentage of the control mean) is 20%; the first year Wildcat differential was 17%.

 $[\]underline{\mathbf{b}}'_{\text{The numbers in parentheses}}$ are 95 percent confidence intervals.

TABLE 18

WEEKS INCARCERATED IN FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

	Percentage Incarcerated		Experimental-Control Differential in	Mean Weeks Incarcerated for Total Sampleb/		Experimental-Control
	Experimental	Control	Percentage Incarcerateda/	Experimental	Control	Differential in Mean Weeks Incarcerateda/
<u>Total</u>	14.0	17.9	-3.9 (-9.4 to 1.6)	1.79	2.35	-0.56 (-1.47 to 0.35)
Target Group						·
Ex-Addicts	9.0	10.1	-1.1 (-7.8 to 5.6)	1.41	1.69	-0.28 (-1.62 to 1.06)
Ex-Offenders	21.0	27.5	-6.5** (-12.4 to -0.6)	2.53	3.37	-0.84 (-2.41 to 0.73)
Youth	9.5	16.4	-6.9 (-19.2 to 5.4)	0.95	1.71	-0.76 (-2.51 to 0.99)
Site						,
Jersey City	12.4	17.9	~5.5 (-14.9 to 3.9)	1.45	2.36	-0.91 (-2.51 to 0.59)
Chicago	9.2	12.5	-3.3 (-13.5 to 6.9)	1.68	1.75	-0.07 (-2.36 to 2.22)
Philadelphia		14.9	-3.6 (-14.8 to 7.6)	1.89	2.00	-0.11 (-2.07 to 1.85)
San Francisc	o 19.6	29.7	-10.1 (-29.1 to 8.9)	2.35	4.16	-1.81 (-4.84 to 1.22)

a/The numbers in parentheses are 95 percent confidence intervals.

46

b/ These means include those with zero values.

^{**}Statistically significant at the 95 percent level.

Incarceration is also costly to society; differences in time incarcerated between controls and experimentals, therefore, reflect savings (or costs, depending on the direction of the difference) to society. At the same time we must recognize that sentencing involves considerable discretion. To take but one example, judges may treat Supported Work participants more lightly because of their program affiliation rather than because their crimes are considered less serious.

The results for time incarcerated parallel the arrest results. Although in all target groups and sites, experimentals reported less time incarcerated, these differences were not significant at the 95% level. The experimental-control differentials may possibly increase as the program continues, because of the time it takes to process a person through the criminal justice system. 1/

The final measure of criminal activity we look at is illegal income. Illegal income is defined by asking our respondents whether they were involved in any of a series of illegal activities. For any in which they reported involvement, they were asked how many times (or weeks) they did it and how much they made each time (or week). For illegal income, there is no readily available method for validating self-reports. As can be seen in the discussion below, some of the

½/Wildcat, for example, found larger differentials than we did in looking at whether a person was incarcerated. Their figures, which are limited to incarcerations occurring for offenses committed after assignment to experimental or control status, are 9% for experimentals and 27% for controls. (Wildcat: The First Two Years, Second Annual Research Report on Supported Work, Vera Institute of Justice, November 1974.) By comparison, our figures are 14% for experimentals and 18% for controls. The Wildcat data appear to cover a period somewhat longer than our 9-month period, but this difference may be somewhat counterbalanced by not counting incarcerations for earlier offenses.

reported sums are so large they are difficult to believe. Since only about 20% of respondents report any illegal income, very large values reported by a few respondents can shift the mean value substantially and therefore be particularly troublesome for the analysis. Given the potential problems of misreporting illegal income, this measure of criminal activity is one we have always felt we had to treat in an exploratory fashion. As the sample size increases and we have interviews covering longer time periods, we will see if this problem of extremely large values persists and the degree to which this measure of criminal activity can be reliably used in analysis. 1/

Table 19 shows the percentage who report any illegal income during the 9-month period. The mean amounts of illegal income reported by our sample are given in the first columns of Table 20. These averages are very high, at least in part because a few respondents—more among the control group than among experimentals—reported extremely large amounts of illegal income. To avoid the possible distortions created by these extreme values, we also present a corresponding set of results after we reduced to \$50,000 all reported amounts that were greater than that value. This adjustment reduced the controls' mean more than the experimentals'. As the last three columns of Table 20

TABLE 19

PERCENTAGE REPORTING ILLEGAL INCOME DURING FIRST 9 MONTHS,

EXPERIMENTALS VERSUS CONTROLS

Sample	Experimental	Control	Experimental-Control Differential
Total	18.1	20.1	-2.0 (- 8.1 to 4.1)
Target Group			
Ex-Addicts	14.6	16.1	-1.5 (- 9.7 to 6.7)
Ex-Offenders	20.5	20.6	-0.1 (- 9.8 to 9.6)
Youth	20.6	29.6	-9.0 (-24.9 to 6.9)
Site			
Jersey City	23.0	29.5	-6.5 (-18.1 to 5.1)
Chicago	14.7	5.6	9.1* (- 0.5 to 18.7)
Philadelphia	14.1	19.4	-5.3 (-17.8 to 7.2)
San Francisco	20.5	27.0	-6.5 (-25.2 to 18.7)

 $[\]frac{a}{The}$ numbers in parentheses are 95 percent confidence intervals.

½Even if the results for arrests based on our interview data are validated when checked against the official records, our results for illegal income may still be suspect since (1) illegal income is an inherently more difficult concept for a person to quantify, and (2) there is an extra incentive to tell tall tales about illegal income since it represents successful activity for the respondent, while arrests represent failures.

²/Only 19% of this sample (18% of experimentals and 20% of controls) report any illegal income. Thus, the values for those reporting any have to be very high to yield the averages we see.

^{*}Statistically significant at the 90 percent level.

TABLE 20

INCOME FROM ILLEGAL ACTIVITIES IN FIRST 9 MONTHS, EXPERIMENTALS VERSUS CONTROLS (dollars)

		L /	Experiment	al-			000 Cut-Off	
	Mean Inc	ome ^D /	Control	1	Mean Inc	ome <u>b</u> /	Experimental	-Control
Sample	Experimental	Control	Differentia	11 ^C /	Experimental	Control	Different	
Total ^{a/}	1476	3028	-1552	546)	1438	2012	-574 (-1561 to	
Target Group			·				(-1301 60	413)
Ex-Addicts	798	2744	-1946 (-4316 to	424)	798	2019	-1221 (-2558 to	116)
Ex-Offenders	2362	3978	-1616 (-6141 to 2	909)	2270	2211	59 (-1868 to	1986)
Youth	976	1508	-532 (-1980 to	916)	976	1508	-532 (-1980 to	916)
Site							,	
Jersey City	2437	6826	-4389 (-11005 to 2	227)	2319	3796	-1477 (-3951 to	3471)
Chicago	947	437	510 (- 724 to 1	744)	947	437	510 (- 724 to	
Philadelphia	507	1210	-703 (-1933 to	527)	507	1210	-703 (-1933 to	527)
San Francisc	0 1539	2373	-834 (-3806 to 2	138)	1539	2373	-834 (-3806 to	2138)

 $[\]frac{a}{D}$ Due to missing data the total sample is 687.

 $[\]frac{b}{T}$ These means include those with zero values.

C/The numbers in parentheses are 95 percent confidence intervals.

indicate, some results change considerably when we assign a maximum value of \$50,000 to the estimates of illegal income. The mean illegal earnings of all controls falls by one-third and that for ex-offender controls by almost one-half. There is also a sizable reduction among ex-addicts in the control group and a small one among experimental ex-offenders. All the changes appear to be concentrated in Jersey City. Apparently there are either especially good opportunities to earn illegal income in this area or else those in our sample at this site are particularly enthusiastic in describing the success of their criminal activities.

None of the experimental-control differences were significant at the 95% level. Nor did we find any significant experimental-control differentials when we disaggregated by type of crime, although we had expected a larger differential for crimes against property than for those against persons. 1/

 $[\]frac{1}{}$ Only about 6% reported having committed robbery and 4% reported crimes against persons.

VII. Conclusion

We have examined some of the effects of the national Supported Work demonstration. The analysis has been based on a sample of 691 experimentals and controls, after the experimentals have had an opportunity to be in the program for 9 months. As expected, the experimentals reported much higher legal earnings and hours worked than did the controls. They also reported lower welfare payments and somewhat less criminal activity. The effects on housing and drug usage were less clear-cut.

Given the relatively small sample sizes currently available, the results are about as expected. There are certainly no dramatic surprises. Although we do believe that these initial results deserve attention, it is important to bear in mind (1) that we will eventually have a sample size almost 10 times as large and (2) that we will be following all participants for a minimum of 18 months. Thus, we shall have much more and better data with which to analyze program effects. The present results should be viewed mainly as a preliminary illustration of the kind of analysis we shall be undertaking in our evaluation of the Supported Work program.

APPENDIX A

Adjusted Experimental-Control Differentials

The results discussed in the text were based on simple differences in mean values between experimentals and controls. We expect, by adjusting for an individual site, target group and a variety of other characteristics (as measured in the baseline interview) that we might reduce the confidence intervals surrounding the results. Therefore we also estimated experimental-control differentials in the various outcome measures using a standard statistical technique called regression analysis. The variables for which we adjusted (the independent variables) are listed in Table A-1.

Since there was random assignment of persons to experimental or control staus, we do not expect the experimental-control differential adjusted by the regression to differ very much from the simple experimental-control differential. Both the simple differential and the regression-adjusted differential are reported in Table A-2 and they are quite similar. Contrary to our expectations, the confidence intervals are also not very different for the two sets of results. 1/

Regression analysis can also be used to determine the degree to which the experimental-control differential varies in statistically significant ways when we disaggregate the sample into various sub-groups

^{1/}The regression adjustment based on the variable in Table A-1 did not change any of the confidence intervals enough to affect their statistical significance at the 95% level.

TABLE A-1

DESCRIPTIONS OF INDEPENDENT VARIABLES

FOR OBTAINING ADJUSTED EXPERIMENTAL-CONTROL DIFFERENTIALS

	<u>Variable</u>	<u>Description</u>
1.	Age: Under 21	Coded 1 if respondent is under 21 years of age, 0 if not.
2.	Age: Over 35	Coded 1 if respondent is over 35 years of age, 0 if not.
3.	Sex	Coded 1 if respondent is a male, 0 if not.
4.	Race: White	Coded 1 if respondent is white, 0 if not.
5.	Race: Spanish	Coded l if respondent is a member of a Spanish-speaking ethnic group, 0 if not.
6.	Education: 8 -11 years	Coded 1 if respondent has between 8 and 11 years of education, 0 if not.
7.	Education: 12 years	Coded 1 if respondent has 12 years of education, (i.e., is a high school graduate), 0 if not.
8.	Education: more than 12 years	Coded 1 if respondent has more than 12 years of education (i.e., some education beyond high school), 0 if not.
9.	Household size	Number of members in the respondent's household, including respondent.
10.	Spouse or cohabitee present	Coded 1 if the respondent lives with a spouse or cohabitee, 0 if not.
11.	Dependents in household	Coded 1 if the respondent lives with any dependents in the household, 0 if not.
12.	Philadelphia	Coded l if the respondent is in Philadelphia, 0 if not.

Table A-1 (Continued)
Page Two

Variable <u>Description</u> 13. San Francisco Coded 1 if the respondent is in

14. Chicago Coded 1 if the respondent is in Chicago, 0 if not.

15. Ex-addict Coded 1 if the respondent is in the ex-addict target group, 0 if not.

San Francisco, 0 if not.

16. Youth Coded 1 if the respondent is in the youth target group, 0 if not.

17. Number of arrests

before program entry

Total number of times the respondent
was arrested prior to program entry,
as reported in the baseline.

18. Regular use of heroin Coded 1 if the respondent (in the baseline) reported ever using heroin prior to program entry, 0 if not.

19. Outcome behavior before program entry

Corresponds to the specific outcome variable in the regression. For any particular outcome, this variable is the reported outcome behavior prior to program entry, as reported in the baseline. For example, if the outcome variable is number of months incarcerated during the 9month period, this variable is the total number of months incarcerated prior to program entry, as reported on the baseline. (Note: This variable is not included in regressions in which the dependent variable is number of arrests or whether respondent has ever used heroin, because baseline measures of these variables are already included in all regressions--see variables 17 and 18 above.)

20. Experimental status Coded 1 if the respondent is an experimental, 0 if a control.

Table A-1 (Continued)
Page Three

	Variable	Description
21.	ExperimentalPhiladelphia	Coded 1 if the respondent is an experimental and in Philadelphia, 0 if not; i.e., the variable is coded 0 if respondent is a control or in a site other than Philadelphia.
22.	ExperimentalSan Francisco	Coded 1 if the respondent is an experimental and in San Francisco, 0 if not; i.e., the variable is coded 0 if respondent is a control or in a site other than San Francisco.
23.	ExperimentalChicago	Coded l if the respondent is an experimental and in Chicago, 0 if not; i.e., the variable is coded 0 if respondent is a control or in a site other than Chicago.
24.	ExperimentalEx-addict	Coded 1 if the respondent is an experimental and in the ex-addict target group, 0 if not; i.e., the variable is coded 0 if respondent is a control or in a target group other than ex-addict.
25.	ExperimentalYouth	Coded 1 if the respondent is an experimental and in the youth target group, 0 if not; i.e., the variable is coded 0 if respondent is a control

or in a target group other than youth.

TABLE A-2

ADJUSTED VERSUS UNADJUSTED EXPERIMENTAL-CONTROL DIFFERENTIALS:

TOTAL SAMPLE RESULTS FOR ALTERNATIVE DEPENDENT VARIABLES

	Experimental-Contr	ol Differentials a/
Dependent Variable	Adjusted	Unadjusted
Total Earnings (\$)	2075** (1750 to 2400)	2035** (1708 to 2362)
Total Hours	748** (672 to 824)	745** (669 to 821)
Mean Wage Rates (\$/hour)	~.61** (-1.12 to19)	60** (94 to26)
Monthly Rent (\$)	8.4* (03 to 16.8)	8.0* (-1.1 to 17.1)
Percent Reporting Heroin Use	.7 (-6.2 to 7.6)	.7 (-6.2 to 7.6)
Percent Reporting Cocaine Use	-4.4 (-9.9 to 1.1)	-3.0 (-8.7 to 2.7)
Illegal Income (\$)	-1294 (-3390 to 800)	-1552 (-3650 to 546)
Number of Arrests	077 (183 to .029)	072 (182 to .038)

 $[\]underline{a}$ The numbers in parentheses are 95 percent confidence level.

^{*}Statistically significant at the 90 percent level.

^{**}Statistically significant at the 95 percent level.

The most obvious disaggregation, of course, is by site and by target group. Other disaggregations tested were:

- (1) program more (less) than six months old when the person was assigned to experimental or control group;
- (2) earnings more (less) than \$1000 in year prior to assignment;
- (3) less than 12 versus 12 or more years of school;
- (4) age less than 21 versus 21 to 30 versus over 30 years;
- (5) ever (never) used heroin prior to assignment;
- (6) meets (doesn't meet) eligibility criteria established for participants in Supported Work;
- (7) more than one arrest prior to assignment versus one arrest or less.

Aside from the few cases mentioned in the text, we did not find notable differences when we performed this less aggregative analysis.

APPENDIX B

Further Analysis of Drug Use

In the main part of this report we have presented some preliminary results on the use of drugs at any time during the 9-month period. In this appendix we shall present a summary of analyses of two further issues related to drug use: an investigation of the quality of the self-reported data and some initial results on other dimensions of drug use. In these analyses we present a number of comparisons between drug use of controls and experimentals, but because our sample size is small, we cannot estimate these differences with much precision. As our sample size increases we can have more confidence in our estimated differences in drug use of experimentals and controls, and can more adequately assess the effectiveness of Supported Work.

Quality of the Drug Use Data

The data on drug usage which we analyze are based on the respondents' own reports of their drug usage. There are reasons to be concerned that this type of information has a potentially higher risk of being misreported or biased than information on income or employment experience. Respondents may underreport their drug usage because they fear that full reporting will be incriminating. For example, firms may not be willing to employ drug users, and possession of drugs may lead to criminal sanctions. Respondents have been informed that their reports to us are confidential and legally protected from disclosure, but these

assurances may not be sufficient to persuade them to discuss their use of drugs freely. Although this wariness is likely to result in under-reporting of drug use, we cannot be certain that all errors will be in the direction of underreporting. To the extent that the ability to sustain heavy drug usage has prestige in certain groups, respondents may over-report drug use.

If errors in reporting are equal and in the same direction for experimentals and controls, the likelihood of finding a statistically significant experimental-control differential may not be affected, although the size of the differential may be changed. The most serious problem arises when the misreporting of experimentals differs from that of controls. During the time the experimentals are participating in the program they could be concerned that, despite our assurance of confidentiality, reports of their drug use could get back to the program and jeopardize their Supported Work jobs. If, for this reason or others, experimentals do underreport more than controls, the estimated experimental-control differential would not reflect the true differential, and false conclusions could be drawn about the effectiveness of the program. In the post-program period the incentives to misreport drug use can be expected to be much more equal for control and for experimentals, and this potential for bias should accordingly be reduced.

At the time of the 9-month interview, when 45% of the experimentals were still participating in the program, there was some evidence that experimentals were less candid than controls about their use of heroin. As part of this interview, respondents were asked about drug

use over the full nine months, including the month of their random assignment to the experimental or control group. We found that fewer experimentals than controls admit using heroin at the month of assignment in the nine-month interview. If Given random assignment, we would expect an equal number of experimentals and controls to report using heroin in that time. This was the case for a similar question asked on month-of-assignment usage in the baseline interview, and there were no such experimental-control differences in month-of-assignment use of drugs other than heroin.

Furthermore, the data on the months the respondents reported they started and stopped using heroin suggest that the experimentals are particularly reticent to admit using heroin in time periods when they had specific contact with the interviewer. There is no evidence, however, that experimentals are differentially underreporting whether they used heroin at any time during the 9 months, which was the measure considered in the main part of the report. For this in-program analysis, results based on use at any time should thus be given more weight than those based on more specific timing of drug use.

Drug Use in the 9-Month Period

While we expect an overall reduction in drug use as result of Supported Work, the effects may differ by type of drug. Some drugs can be as

 $[\]frac{1}{\text{This}}$ differential is larger for experimentals in Philadelphia and in the ex-offender target group.

substitutes for each other. Supported Work may induce participants to shift away from drugs which are debilitating and toward drugs which are more compatible with work. In an attempt to identify such patterns, we have examined the relationship between the respondents' work history during the two years before the month-of-assignment and their prior use of the various types of drugs. The results of this analysis and other considerations have led us to expect different experimental responses for different drugs. These expectations are discussed below.

First we repeat the results presented in the text for the percent of experimentals and of controls who used drugs at any time during the 9-month period. 1/ For those who reported some use, the average duration and the percent who report current use of the drug are also presented. We shall present these dimensions for two relatively frequently used drugs: heroin and cocaine. We also present results for the percentage in drug treatment programs.

Heroin

We expect that Supported Work will reduce the participants' use of heroin based on various theories of addiction and on an investigation of the two-year work histories of our sample members. 2/ We found that users of heroin worked significantly fewer weeks than users of other drugs. Since we expect Supported Work to have the greatest

effect on the consumption of drugs whose use is most incompatible with work, this work-history evidence suggests that Supported Work may have a particularly large effect on heroin use. 1/

The results in Table B-1, however, indicate that for this sample there is little overall difference in the use of heroin by experimentals and controls: roughly 22% of both groups reported using heroin at some time during the 9-month period. Among those who used heroin, experimentals reported using it an average of two weeks less than controls, but this difference is not statistically significant. The dosage and frequency of current use of heroin also show no significant experimental-control differences.

Illegal Methadone

A major difficulty in working while using opiates is that it may be necessary to take drugs on the job to alleviate withdrawal distress. Those who have jobs may prefer to use methadone while working since its effects are longer lasting. It may also be less euphoric and thus interfere less with work performance. Since we find a substantial number of participants who report using heroin, we might expect an increase in the use of illegal methadone for experimentals relative to controls.

Table B-2 indicates that experimentals do report the use of methadone more often than controls although the results are not statistically significant.

¹/These results are based on the simple differences in means. Where sample size permitted, we also obtained adjusted means and the results were very similar to those presented here.

^{2/}Preliminary Report on Drug Use From the Nine-Month Supported Work Interviews, Kathy Dickinson and Jean Behrens, MPR, July 1977.

This association between poor work history and heroin use does not necessarily imply work is incompatible with heroin use. It may be that respondents began using heroin because they were unemployed.

Other Opiates

In general we expect Supported Work to reduce the use of morphine and other opiates since their effects and the consequences of their use are similar to those of heroin. It is possible, however, that some longer-lasting drugs, like morphine, could also be used to manage heroin addiction while working. Our preliminary results show, in Table B-3, that 9% of the participants and 11% of controls reported using these other opiates at sometime during this period. This difference is not statistically significant.

Alcohol

A fairly common pattern among ex-addicts is to use alcohol in large quantities while remaining abstinent from heroin. Thus, if Supported Work is effective in reducing heroin use among participants, it may eventually lead to an increase in the use of alcohol. Alternatively, it may reduce alcohol use for many of the same reasons we expect it to reduce heroin use. Table B-4 shows that although there is no significant difference in the number who drink during the 9-month period, significantly fewer experimentals than controls report using alcohol on a daily basis.

Also shown in Table B-4 are the average amounts consumed of each type of alcohol (in ounces of pure alcohol content) on days when the person drank that type. 1/ Although the dosages for experimentals are

TABLE B-1

REPORTED USE OF HEROIN DURING THE 9-MONTH PERIOD

	Experimental	Control	Experimental- Control Difference
Percent Who Reported Heroin Use in 9 Months	22.8	22.1	0.7 (-6.2 to 7.6)
For those who used:	n=80	n=74	
Mean duration (months)	4.3	4.7	-0.4 (-1.5 to 0.7)
Percent reporting current use	23.2	32.3	-9.1 (-24.4 to 6.2)
For current users:			
Frequency	n=16	n=20	
Every day or almost every day	19	25	- 6.0 <u>b/</u>
Few times a week	31	40	- 9.0
Few times a month	19	30	-11.0
Less often	31	5	+26.0
Daily DosageC/	n=11	n=18	
1-5 bags	55	56	- 1.0 <u>b/</u>
6 bags or more	45	44	+ 1.0

 $[\]frac{a}{T}$ The numbers in parentheses are 95 percent confidence intervals.

^{1/}DDosages were estimated by making assumptions, similar to those in other studies, about the average alcohol content in each type of alcoholic beverage.

 $[\]underline{\underline{b}}$ We tested the statistical significance of the set of multiple categories rather than developing confidence intervals for each difference in means. The experimental-control differences were not statistically significant.

 $[\]underline{\mathbf{c}}_{\mathsf{Dosage}}$ was asked only of those using a few times a month or more often.

TABLE B-2
REPORTED USE OF ILLEGAL METHADONE

	Experimental	Control	Experimental- Control Difference a/
Percent Who Reported Use During 9 Months	4.0	2.1	1.9 (-0.6 to 4.4)
For those who used:	n=12	n=6	
Mean duration (months)	2.5	3.7	-1.2 (-4.2 to 1.8)
Percent reporting current use	16.7	33.3	-16.6 (-58.9 to 25.7)

TABLE B-3
REPORTED USE OF OTHER OPIATES

	Experimental	Control	Experimental- Control Difference a/
Percent Who Reported Use During 9 Months	9.0	11.1	-2.1 (-6.6 to 2.4)
For those who used:	n=32	n=36	
Mean duration (months)	3.5	3.8	-0.3 (-1.9 to 1.3)
Percent reporting current use	37.5	27.8	9.7 (-12.6 to 32.0)

 $[\]underline{a}$ The numbers in parentheses are 95 percent confidence intervals.

TABLE B-4

REPORTED USE OF ALCOHOL DURING 9-MONTH PERIOD

	Experimental	Control	Experimental- Control Difference
Percent Who Reported			
Drinking Alcohol	70.2	74.9	-4.7
			(-17.6 to 8.2)
For those who drank:	n=250	n=252	
Frequency			
Every day or			
nearly every day C/	11.7	18.4	-6.7 <u>b</u> /
Few times a week	48.1	41.2	+7.1
Few times a month	14.5	19.2	-4.7
Less often	25.5	21.2	+4.3
Usual daily dosage when drinking each type of alcohol (oz. of pure alcohol) d/			
Beer	2.0 (n=163)	1.8 (n=167)	0.2 (-0.2 to 0.6)
Wine	3.3 (n=94)	2.7 (n=98)	0.5 (-0.5 to 1.5)
Liquor	4.5 (n=94)	4.3 (n=84)	0.2 (-1.0 to 1.4)

 $[\]frac{a}{}$ The numbers in parentheses are 95 percent confidence intervals.

b/We tested the statistical significance of the set of multiple categories rather than developing confidence intervals for each difference in means. The experimental-control differences were not statistically significant.

 $[\]frac{c}{T}$ The experimental-control difference on daily drinking is significant at the 95 percent level.

 $[\]frac{d}{}$ These numbers are the mean dosage for those who report drinking the type of alcohol.

CONTINUED 10F2

somewhat higher than those for controls for each type of alcohol, these differences are not significant. 1/

Cocaine

In examining the work history of our total sample for the two years prior to assignment, we found that cocaine users worked significantly more than users of other drugs and even more than those who did not use any drugs. This may be a result of two factors. First, cocaine is a stimulant and as such may actually increase work performance for some in the Supported Work target groups. Secondly, since it is a rather expensive "luxury" drug, it may be that those who work more are more able to afford cocaine. We had thus expected that those who desired to use drugs but wanted to avoid opiate addiction might use more cocaine if they had some income. The results in Table B-5 do not bear out this expectation: somewhat fewer participants than controls report using cocaine during the 9-month period.

Among those who used cocaine, there are no significant differences in duration or current frequency and dosage.

Amphetamines and Other Stimulants

Although amphetamines and other stimulants were used less frequently by our sample members, the effects of these drugs are quite

TABLE B-5

REPORTED USE OF COCAINE DURING 9-MONTH PERIOD

			Experimental- Control
	Experimental	Control	Difference
Percent Who Reported Use			
During 9 Months	16.9	19.9	-3.0 (-8.7 to 2.7)
For those who used:	n=60	n=66	
Mean duration (months)	5.2	5.3	-0.1 (-1.5 to 1.3)
Percent reporting			
current use	44.4	44.8	-0.4 (-20.0 to 19.2)
For current users:			
Frequency	n=24	n=25	
Every day or nearly every day	4	4	0.0 b/
Few times a week	13	20	-7.0
Few times a month	26	36	-10.0
Less often	58	40	+13.0
Daily Dosage			
1-2 hits	30	33	- 3.0 b/
3-4 hits	60	40	+27.0
5 or more hits	10	27	-17.0

 $[\]underline{\underline{a}}$ The numbers in parentheses are 95 percent confidence intervals.

^{1/}We cannot compare overall daily alcohol dosage between experimentals and controls because we do not know the frequency of drinking for each type. This information will, however, be available in the 27-month interview.

 $[\]underline{b}/w$ e tested the statistical significance of the set of multiple categories rather than developing confidence intervals for each difference in means. The experimental-control differences were not statistically significant.

similar to those of cocaine. We also found the work histories of users of stimulants to be better than average: in particular, they had less absentee ism and less tardiness. From this evidence, we had some expectation that Supported Work participants might use stimulants more often than controls. The reported use was essentially equal, however, as shown in Table B-6. Among those who used amphetamines, the experimentals used them for a significantly shorter period of time than did the controls.

Barbiturates and Other Depressants

The use of these sedatives was associated with poorer work performance in our analysis of work history patterns so our expectations were that experimentals would use less of these drugs. In Table B-7 we find that while 5% of both experimentals and controls reported use of barbiturates and other depressants at some time during the period, experimentals reported using the drug for somewhat shorter periods and were significantly less likely to be currently using these drugs than were controls.

Psychedelics

The use of psychedelics such as LSD and mescaline was relatively infrequent among our sample prior to assignment: only 22% reported ever using this type of drug. Their use during the nine-month period was also infrequent, but as shown in Table B-8, the controls reported using psychedelics significantly more often than participants and for a longer period of time. Although it is proportionately large and statistically significant, this result is based on very few observations and thus awaits a large sample for confirmation.

TABLE B-6

REPORTED USE OF AMPHETAMINES AND OTHER STIMULANTS

DURING THE 9-MONTH PERIOD

	Experimental	Control	Experimental- Control Difference ^a /
Percent Who Reported Use During 9 Months	3.1	3.9	-0.8 (-3.6 to 2.0)
For those who used:	n=10	n=13	
Mean duration (months)	3.4	5.8	-2.4* (-5.2 to .4)
Percent reporting current use	30.0	58.3	-28.3 (-70.3 to 13.7)

TABLE B-7

REPORTED USE OF BARBITURATES AND OTHER DEPRESSANTS

DURING 9-MONTH PERIOD

	Experimental	Control	Experimental- Control Difference ^{a/}
Percent Who Reported Use During 9 Months	5.1	5.1	0.0 (-3.3 to 3.3)
For Those who used:	n=18	n=17	
Mean duration (months)	4.1	6.5	-2.4** (-4.4 to4)
Percent reporting current use	22.2	58.8	-36.6** (-67.6 to-5.6)

 $[\]frac{a}{T}$ The numbers in parentheses are 95 percent confidence intervals.

^{*} Significant at the 90 percent level.

^{**} Significant at the 95 percent level.

TABLE B-8

REPORTED USE OF PSYCHEDELICS DURING THE

9-MONTH PERIOD

	Experimental	Control	Experimental- Control Difference
Percent Who Reported Use During 9 Months	0.6	3.3	-2.7** (-4.7 to -0.7)
For those who used:	n=2	n=10	
Mean duration (months)	1.0	6.0	-5.0 ** (-7.2 to -2.8)
Percent reporting current use	0	40.0	-40.0 (-146.0 to 66.0)

TABLE B-9

REPORTED USE OF MARIJUANA DURING THE

9-MONTH PERIOD

	Experimental	Control	Experimental- Control Difference
Percent Who Reported Use			
During 9 Months	62.8	66.0	-3.2
			(-10.5 to 4.1)
Day those who used.	n=208	~-206	
For those who used:	n=208	n=206	
Percent reporting			
current use	76.9	68.9	8.0*
			(-0.6 to 16.6)

 $[\]underline{a}$ The numbers in parentheses are 95 percent confidence intervals.

Marijuana

Marijuana was used very frequently by our sample members

prior to assignment: 85% reported having used this drug at some time.

Since it is non-addictive and its effects are relatively mild and of short

duration, we did not expect Supported Work to have much effect on

marijuana use except perhaps through a general reduction in peer support

for drug use. In Table B-9, we see that its reported use during the 9-month

period was also frequent and that somewhat fewer experimentals than controls

reported using the drug. Among those who did use the drug, however, experimentals

were more likely to be currently using it than controls.

Drug-Treatment Programs

Another indicator of involvement with drugs is whether the person was in a treatment program for drug use. Our expectations as to the effects of Supported Work are again mixed. If the program reduces drug use, in the long-run it is expected to reduce the need for drug treatment. In the short-run, however, this may not be the case. To the extent that Supported Work increases the participants' commitment to stay off drugs, they may be more likely to seek treatment or to remain in programs they were in before Supported Work began.

Table B-10 indicates that roughly one-third of both experimentals and controls were in drug-treatment at some time during the 9-months. The experimentals were less likely to be in the long-term methadone maintenance programs and were more likely to seek other treatment such as out-patient detoxification and counselling-only

^{*} Significant at the 90 percent level.

^{**} Significant at the 95 percent level.

TABLE B-10

DRUG-TREATMENT EXPERIENCES DURING THE 9-MONTH PERIOD

	Experimental	Control	Experimental- Controla/ Difference
Percent in Treatment During 9 Months	32.6	34.3	-1.7 (-8.2 to 4.8)
For those in treatment during 9 months:	n=116	n=115	
Percent currently in treatment	64.6	79.1	-14.5** (-26.1 to -2.9)
Type of most recent treatment			
Methadone maintenance	57.5	65.5	- 8.0 <u>b</u> /
Drug free	14.2	17.7	- 3.5
Other	28.3	16.8	+11.5

 $[\]underline{a}/_{\text{The numbers in parentheses}}$ are 95 percent confidence intervals.

programs. These differences in mode of treatment may account for the fact that significantly fewer experimentals reported current treatment at the time of the 9-month interview.

Conclusions

In this appendix we have explored several additional issues related to drug use. With respect to the quality of the self-reported data, we had some expectations that experimentals might underreport drug use more than controls for the in-program period when they could fear losing their Supported Work jobs. We do find some evidence that experimentals report less heroin use at month-of-assignment than do controls, but this differential underreporting is more evident for time references when the respondent had specific contact with the interviewer. We find no evidence that reported use at any time during the 9 months is differentially reported and thus have more confidence in that measure.

We have examined several dimensions of drug use, and the results for this initial sample do not indicate any large reduction in drug use for participants. We find the use of heroin to be essentially equal for experimentals and controls. Significantly fewer experimentals are using alcohol and psychedelics, and among users of amphetamines and barbiturates, experimentals are using these drugs for a shorter time.

Most of the other differences we observe in drug use are within the range of sampling variability.

In the future, larger sample sizes should reduce this sampling variability and thus provide a better opportunity to test the effects of Supported Work on drug usage both for the total sample and for various sub-groups.

 $[\]underline{b}/_{\text{We}}$ tested the statistical significance of the set of multiple categories rather than developing confidence intervals for each difference in means. The experimental-control differences were not statistically significant.

^{**}Significant at the 95 percent level.

APPENDIX C

Assessment of the Program by Participants

In the text we have presented data showing how experimentals compare to controls. Such an analysis is the best way to determine the effects of the program. But other sorts of information can also be helpful, especially in describing the program. MDRC is running a set of documentation studies under the direction of Joseph Ball in an effort to determine what problems site operators have faced in implementing Supported Work and how these problems have led to alternative ways of running the program. One alternative way of looking at the program is to ask participants about their perceptions of it. One of the most interesting questions in this regard is: "Was your Supported Work job different from other jobs you've had?" From those answering yes, we also wanted to know "How was it different from your other jobs?" The answers to these questions are tabulated in Table C-1.

About 14% of the experimentals either didn't participate in Supported Work long enough to be asked the question or else had no other job with which to compare the program. Another 21% didn't consider it different from their other jobs. Of those who did find it different, the most frequently cited factor (15%) was the chance to learn new skills or a new trade. Another frequently cited positive difference was that participants like the work better (5%). Others simply indicated that the work was different (7%) without saying whether they liked it better. Two negative assessments were cited frequently—8% of the participants felt that the program was poorly run (that is, disorganized or had unfair rules) while 6% complained about the low

TABLE C-1

PARTICIPANT ASSESSMENT OF HOW SUPPORTED WORK

DIFFERS FROM OTHER JOBS

Pogpongo	Number Responding—	Percentage of All Experimentals Responding
Response	Responding	
Not Available		
No shows	12	3.4
Not in program 30 days	25	7.0
No other jobs	14	3.9
Missing	1	0.3
Supported Work not different	73	20.6
Job Skills and Attitudes		
Learn new skills or trade	54	15.2
Skills learned not useful	1	0.3
Develop better work attitudes	2	0.6
Develop self-confidence	3	0.8
Type of Work		
More enjoyable work	19	5.4
Less enjoyable work	4	1.1
Different kind of work	26	7.3
Easier work	6	1.7
Harder work	8	2.3
Program/Supervisor		
Program/Supervisor More interest in individual	12	3.4
More supervision	7	2.0
Less supervision	1	0.3
More lenient supervision	6	1.7
Program run poorly	29	8.2
Program run better	6	1.7
Program run differently	14	3.9
Liked those running program	3	0.8
Didn't like those running program	9	2.5
The last Manufacture		
Fellow Workers	6	1.7
Like target group workers Don't like such workers	6 9	2.5
Such workers are different	6	1.7
Wages and Working Conditions	0.0	6.2
Low wage rates	22	0.3
Poorer benefits	1	1.1
Better benefits	4	0.8
More chance for advancement	3	0.6
Better working conditions	2	1.4
Poorer working conditions	5	0.3
Longer hours	1	0.3
Other	6	1.7

<u>a/</u>Multiple responses are included.

wage rates.

We also asked participants the following questions:

- (1) "Did Supported Work prepare you to get a regular job outside the program? If so, how?"
- (2) "Are there things you didn't like about working at Supported Work? If so, what?"
- (3) "As a result of working at Supported Work, what would you say is the most important thing that happened to you?"

The primary answers to these questions are given in Table C-2. 1/ Thirty-three percent of the experimentals believe Supported Work did prepare them for an unsubsidized job. Of this group, the vast majority cited either job skills learned at Supported Work (19%) or the development of better work habits and attitudes (16%). Note that, in contrast to the answers concerning how Supported Work differs from other jobs, more workers in this question sequence mentioned the development of better work habits and attitudes. Improving job skills and work attitudes were also two of the primary factors mentioned when workers were asked about the most important thing that happened to them as a result of the primary factors mentioned answer to this questio. Was the chance to work and earn a steady income. Greater self-confidence and "staying out of trouble" were also mentioned frequently.

In interpreting all of these answers, of course, we should keep in mind that some of the workers may be telling us what they think we want to hear. Nevertheless, over half the participants were

TABLE C-2

PARTICIPANT ASSESSMENTS OF THEIR SUPPORTED WORK EXPERIENCE

Question: Did Supported Work prepare you to get a regular job outside the program? If so, how?

Response	Number Responding	Percentage of All Experimentals
YES	118	33.2
NO	181	51.0
Most frequent explanations		
Learned job skills, trade	67	18,9
Better work habits and attitudes	55	15.5
All other explanations	39	<u>a</u> /

Question: As a result of working at Supported Work, what would you say is the most important thing that happened to you?

Response	Number Responding	Percentage of All Experimentals
Learned job skills, trade	66	18.6
Better work habits and attitudes	47	13.2
Steady job, income	51	14.4
Self-confidence, self-esteem	40	11.3
Stayed out of trouble, off drugs	30	8.5
Nothing	81	22.8
Other	93	<u>a</u> /

Question: Are there things you didn't like about working at Supported Work? If so, what?

Response	Number Responding	Percentage of All Experimentals
YES	170	47.9
NO	147	41.4
Most frequent complaints		
How program is run	54	15.2
Low pay	57	16.1
All other complaints	112	<u>a</u> /

 $[\]underline{a}/A$ percentage has not been calculated since experimentals were permitted multiple responses.

79

^{1/}Of the individual items tabulated together in the "other" category, no single one received as many as 20 responses. The most frequent were complaints about supervisors (19) and about working conditions (18).

willing to tell us that there are aspects of the program they didn't like. 1/ The most frequently cited factors were the same ones mentioned in connection with the issue of how Supported Work differs from other jobs—low pay (15%) and the way the program is run (16%). Since some of these criticisms may be the result of program start-up problems, they may diminish as we obtain information from those who enrolled after the programs have become better established. 2/ The criticism of low pay is to be expected, because the program is designed so that its workers will have an incentive to move into unsubsidized jobs once they are sufficiently prepared. 3/ Its success in this regard will be analyzed in subsequent reports.

END

^{1/}This percentage does not differ dramatically by either site or target group.

^{2/}Our data include only a small number who enrolled during the first 6 months at any site. Most of our sample were enrolled 7 to 9 months after their site had been officially established.

^{3/}Supported Work wage rates were set low enough to encourage workers to obtain unsubsidized jobs when they could do so but high enough for the program to recruit successfully sizable numbers of those who had had persistent labor market problems.