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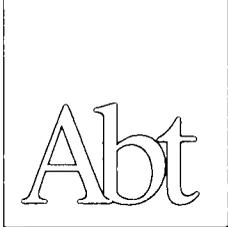
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ABSTRACT

A study examined the impacts of different education and training (E&T) assignments in Ohio's Job Opportunities and Basic Skills (JOBS) Training Program on the employment and earnings of Aid to Families with Dependent Children recipients who became mandatory JOBS clients in 1989 or 1990. Data on the JOBS assignments and earnings and employment of a random sample of 12,556 members of the JOBS evaluation's treatment group were obtained from Ohio's automated JOBS tracking and unemployment insurance systems. A comparison of the employment and earnings patterns of treatment group members who did and did not ever receive E&T assignments failed to uncover any statistically significant impacts of JOBS program participation for either the ever-assigned or never-assigned client groups. A comparison of outcomes of different types of E&T activity established that assignments to job clubs, postsecondary education, and job readiness training activities were generally associated with positive impacts, whereas assignments to basic education were associated with lower-than-expected earnings. Assignments to community work experience had no statistically significant effects on earnings. (Fourteen exhibits are included. Appended is the impact estimation method used to estimate program outcomes.) Contains 17 references. (MN)

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Associates Inc.

**THE OHIO
TRANSITIONS TO
INDEPENDENCE
DEMONSTRATION**

**JOBS ASSIGNMENTS
IN OHIO:
PATTERNS AND
IMPACTS**

By David J. Fein

December 1994

BEST COPY AVAILABLE

Submitted to:

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EXECUTIVE SUMMARY

Employment and training (E&T) services lie at the heart of the Job Opportunities and Basic Skills Training Program (JOBS). However, relatively little research has documented either the kinds of E&T assignments that recipients of Aid to Families with Dependent Children (AFDC) experience or the outcomes of their participation. Federal statutes require states to report only the total number of people assigned to E&T during a calendar period, statistics which convey little about what JOBS means to individual clients. Large-scale, random-assignment evaluations have measured overall impacts of E&T programs on self-sufficiency, but typically are not designed to identify the specific services that are and are not effective.

Two broad features of JOBS have shaped the E&T experiences of participants in different states. One is that, within broad guidelines, states have considerable latitude in designing specific services; in determining the overall mix of activities in their program; and in establishing criteria for assigning clients to first and subsequent activities. A second noteworthy attribute of JOBS is the open-endedness of its participation requirement. Unlike predecessor programs, whose services were of fixed durations, non-exempt clients are expected to participate in JOBS activities for as long as they continue to receive AFDC.

These program features raise important questions about the E&T participation of JOBS participants. What kinds of services are being emphasized in state JOBS programs? How do clients' participation in assignments cumulate over time, and what are the patterns of progression from one to the next type of E&T activities? Finally, which activities appear to have the greatest impacts on self-sufficiency?

In this report, we present detailed findings on patterns of E&T assignments and the effects of these assignments on employment and earnings for recipients of AFDC in the state of Ohio (where the program is referred to as Aid to Dependent Children, or ADC). The study is part of a random-assignment evaluation of the JOBS program in 15 Ohio counties between 1989 and 1992. The purposes of the broader evaluation are to study program implementation and develop rigorous estimates of the program's overall impacts and cost-effectiveness. The present

analysis uses a combination of descriptive and non-experimental statistical techniques to illuminate the E&T experiences underlying net impacts.

Most of the analyses in this report are based on a random sample of 12,556 members of the evaluation's treatment group who first became JOBS-mandatory in 1989 or 1990.¹ Data on JOBS assignments were obtained from the state's automated JOBS tracking system, in the form of records identifying the beginning and ending dates for spells of JOBS-mandatoriness and spells of assignment to E&T activities. Employment and earnings data come from the state's Unemployment Insurance system, and represent quarterly earnings reported by employers.

OVERALL ASSIGNMENT RATES

Period assignment rates calculated in this study suggest that Ohio had little difficulty meeting the Federal participation standards between 1989 and 1992. Although our method for calculating assignment rates differed somewhat from that specified in the Federal statutes, the margins appear to be large enough to support this conclusion. For example, Federal rules required 11 percent of non-exempt clients to be in JOBS E&T assignments in 1992, and we find a 25-percent assignment rate for Ohio in that year.

Although the Federal government was not yet enforcing separate participation standards for two-parent families during the period covered by this analysis, such families still were subject in theory to special requirements pertaining to assignments to work activities. Our findings suggest that fewer clients from two-parent families were being assigned to work activities than was required by the Federal rules.

Although no more than 25 percent of clients were actively assigned to JOBS activities at any one time, the proportion of clients who were assigned at some point during their ADC spell is higher. Among clients who ever were JOBS-mandatory, 38 percent of those who entered

¹ Clients are considered to be JOBS-mandatory if they were non-exempt according to Federal criteria and receiving ADC in a county that had implemented JOBS. Prior to July 1991, the state granted exemptions for parents caring for a child aged 3-5, who were not exempt under Federal rules. Such clients therefore are excluded from the present analysis.

the demonstration during its first year received at least one E&T assignment during the three-year observation period. Many clients did not receive their first assignment for some months -- sometimes over a year -- after they became technically subject to JOBS requirements. This lag reflected limitations in both the administrative capacity of JOBS program offices and the availability of services.

ASSIGNMENT PATTERNS

Analysis of first E&T assignments suggests that Ohio's JOBS program embraced the key emphases in the national program from the start. For example, education and training assignments accounted for half of all first assignments for clients in the 1989 cohort, and the vast majority of these assignments were to basic or post-secondary education.

CWEP (Community Work Experience) played an important role in Ohio's early JOBS program. Nationwide, the proportion of JOBS participants assigned to CWEP was higher in Ohio (22 percent) than in any other state except Nevada (U.S. Department of Health and Human Services 1994).

Several measures of initial economic disadvantage -- welfare history and recent employment experience -- varied with the type of first assignment in ways which suggest that the assessment process generally was operating as intended. The least disadvantaged clients typically were assigned to activities such as job club and job skills and job readiness training, whereas clients with little work experience and long histories of welfare dependency were assigned disproportionately to basic education or CWEP.

The time clients spent in different E&T assignments varied widely, as evidenced by the typical duration and sequences of assignments. Assignments to post-secondary education lasted the longest, with a median duration of 8.8 months. Other median first assignment durations were 8.5 months for basic education; 5.2 months for job skills; 5.2 months for CWEP; 4.1 months for job readiness; and 1.7 months for job club. Many assignees to basic education, post-secondary education, and CWEP experienced a repeat assignment of the same type, substantially increasing the cumulative number of months spent in these activities.

Although we do not have direct data on educational attainment, we infer that relatively few clients assigned to basic education completed their GED from the finding that few clients first assigned to basic education progressed to activities requiring a GED. Clients frequently were assigned to CWEP after basic education and other first assignments, confirming qualitative reports that CWEP often was an assignment of last resort in Ohio.

OVERALL IMPACTS

The evaluation's formal impact analyses -- reported in Fein *et al.* (1994) -- revealed that Ohio's early JOBS program had only modest impacts on self-sufficiency for the population of clients that was subject to participation in theory. After three years of follow-up, employment rates in the randomly-assigned treatment group were only three percentage points higher than those for the control group. The impact evaluation showed no statistically significant effects on average total earnings, ADC participation, or average total ADC payments.

The experimental design gives us confidence that these estimates are accurate, but does not provide any basis for ascertaining why impacts were so small. With reference to employment and training participation -- the chief route by which JOBS was intended to increase self-sufficiency -- one hypothesis is that impacts were diluted because the treatment group included a majority of clients who never were assigned during the follow-up period.² Another is that assignments came too late for those who received them to allow sufficient time for positive impacts to emerge.

To test the first hypothesis, we separated the overall treatment group into clients who did and did not ever receive E&T assignments over the entire three-year follow-up period, and

² In theory, clients' responses to the JOBS participation mandate could lead to impacts for those never assigned to E&T activities. However, the main sources of JOBS impacts are expected to arise from E&T, especially in the program's early years in Ohio when the mandate was not being widely or vigorously enforced.

estimated impacts separately for each of these groups in the fourth, eighth, and twelfth quarters of research follow-up. A nonexperimental technique was used to estimate these impacts.³

Findings showed no statistically significant impacts for either the ever-assigned or never-assigned client groups. Hence, we can conclude that the dilution of impacts for participants due to the presence of a large pool of nonparticipants in the evaluation's treatment group was not the only factor responsible for the modest overall impact findings.

We then looked more closely at ever-assigned clients to see whether positive impacts on self-sufficiency among early assignees were being masked by less favorable impacts for clients who were not first assigned until relatively late in the follow-up period. We defined "early assignees" as clients who had received their first E&T assignments prior to the fourth quarter of follow-up in the demonstration -- that is, within the first 9-12 months after random assignment.⁴ Results for these "early assignees" did show positive impacts by the end of the three-year follow-up period. Both employment rates and average total earnings were about 13 percent higher in proportionate terms by the twelfth quarter than they would have been absent JOBS. That we did find positive impacts for early assignees suggests that the modest overall impacts measured in the evaluation were at least partly due to the fact that many clients did not receive their first assignments until relatively late in the demonstration. Still, impacts were not very large even among early assignees.

³ This technique involved using information from analyses of employment and earnings determinants in the control group to predict the employment and earnings treatment group members would have had absent JOBS exposure, and then comparing treatment-group members' predicted and actual outcome values. In the Appendix to this report, we discuss the limitations of this technique at some length, which arise mostly from the difficulty of modeling all of the important characteristics determining selection into JOBS assignments. We conclude that the estimates do likely portray the relative effects of different E&T assignments fairly well, if not always the exact magnitudes of impacts for individual assignments.

⁴ Impacts for early assignees represent longer-term effects only in the sense that these clients were enrolled in JOBS relatively early in the demonstration and could *potentially* have had longer spells of activity participation. That these clients received earlier first *assignments* does not necessarily imply either that their actual participation in JOBS activities met any particular quality or quantity threshold, or even that they ever attended activities to which they had been assigned.

IMPACTS OF DIFFERENT TYPES OF E&T ASSIGNMENTS

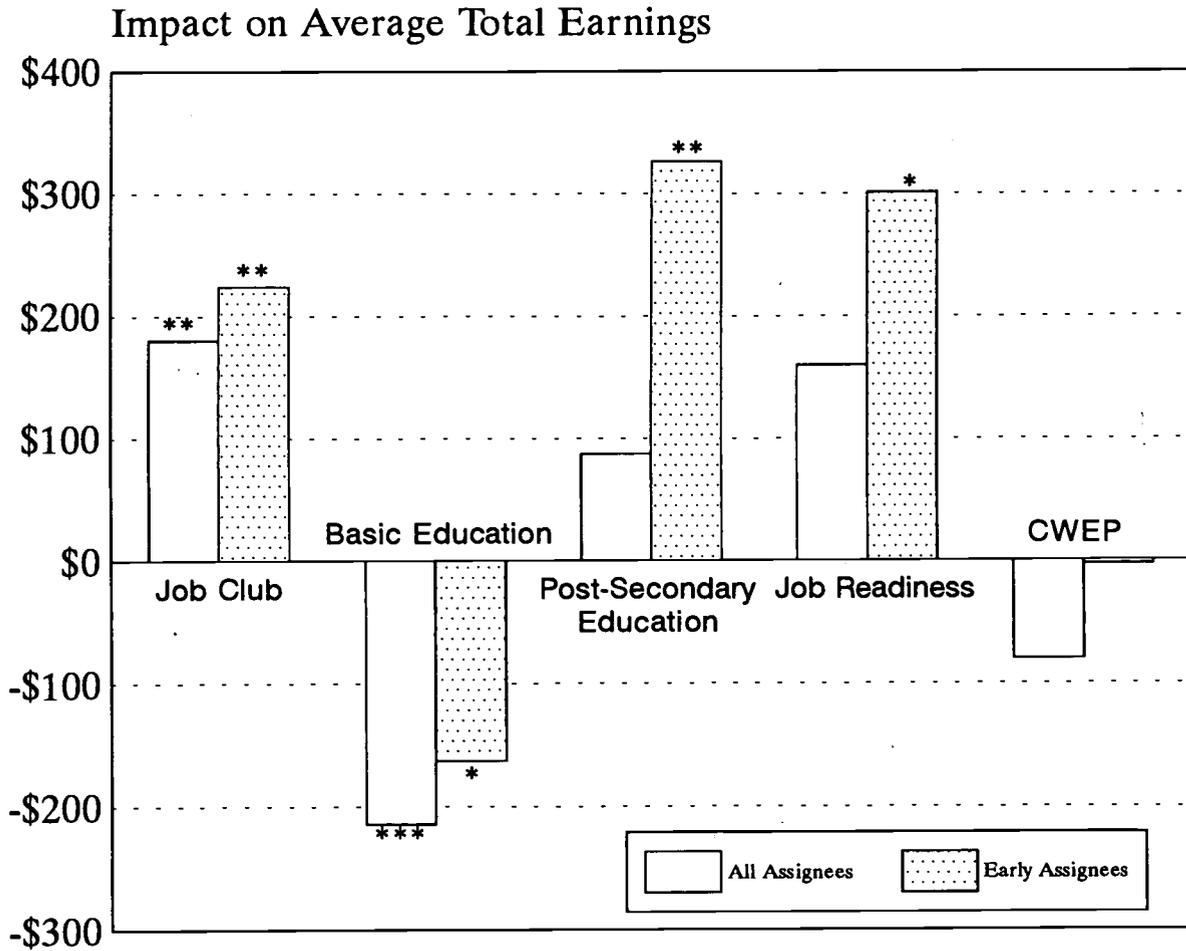
The finding that impacts for ever-assigned clients were insignificant or modest does not preclude stronger positive impacts for some type(s) of assignments, and possibly counterbalancing negative effects for others. As an aid to interpreting overall impact findings, we estimated impacts separately for clients who ever were assigned to each type of E&T activity.⁵ For each activity, two sets of impacts again were estimated: one for all clients ever assigned to the activity and one for clients assigned prior to the fourth follow-up quarter. Exhibit ES.1 summarizes both sets of results.

The results do suggest some important variation in impacts across E&T activities after three years of follow-up. Assignments to job club, post-secondary education, and job readiness training activities generally were associated with positive impacts -- that is, with higher earnings than would have been expected without JOBS. Assignments to basic education, on the other hand, were associated with *lower* earnings than expected, and CWEP assignments had no statistically significant effects on earnings.

Comparing the unshaded and shaded bars for each activity provides information about the rapidity with which impacts of different assignments emerged and how long they persisted. Positive impacts emerged relatively quickly for job club assignments: the fact that impacts were positive and statistically significant for all job club assignees (shown in the unshaded bar, which includes later as well as earlier assignees to this activity), as well as for early assignees (shaded bar), implies that even clients assigned to job club late in the follow-up period benefitted from this activity. Mirroring the job club impacts, comparison of results for all and early assignees suggests that negative impacts for basic education also emerged quickly, and that they persisted throughout the follow-up period. In contrast, impacts for clients assigned to post-secondary and job readiness activities -- though consistently positive in sign -- are statistically significant only among clients who received these assignments early in the follow-up period. Results for CWEP

⁵ Impacts for each activity measured for all clients ever assigned to that activity, regardless of whether they also received other activities. Hence, the estimated impact for a particular E&T activity includes the effects of that assignment plus all other JOES experience assignees had.

**Exhibit ES.1
12th-Quarter Impacts on Total Earnings for All Clients
Receiving Assignments and for Early Assignees^a**



^a Early assignees are clients who were assigned to each activity prior to the fourth follow-up quarter.

also imply little evidence of movement towards positive impacts over time.

These findings accord well with expectations about the timing and nature of impacts of different employment and training approaches suggested by past research. The job club findings confirm results from many other studies suggesting that the job search strategy produces modest positive impacts in both the short- and long-term. Findings for educational activities confirm that human capital investments take longer to emerge than those for job search. They also suggest these assignments can generate negative short-term impacts -- or "opportunity costs" -- if a significant number of clients postpone or reduce work and earnings in order to participate. The results suggest that long-term benefits are likely to outweigh these short-term opportunity costs in the case of post-secondary education and job-readiness training, but not necessarily for basic education. The CWEP findings also square with prior research showing that work experience has had little impact.

The disappointing basic education results suggest that the assignment criteria and design of this activity warrant further scrutiny. Few would argue that basic skills are fundamental requisites for employment in jobs providing long-term income security. However, many clients may lack the motivation and/or basic capacity to benefit from basic education as it is currently structured in Ohio, which mostly mainstreams welfare clients into existing Adult Basic Education training programs. Some clients may be better served by alternative assignments, such as work experience or on-the-job training. For others, less traditional, more individualized approaches to basic skills training may prove to be a more effective strategy.

IMPLICATIONS

The slow pace at which first assignments occurred in Ohio may be taken as a warning about the speed with which we can expect complex new programs such as JOBS to be implemented. Such programs face the difficult tasks of developing administrative capacity to process and monitor clients, creating a sufficient number of suitable E&T placements, and arranging needed supportive services such as child care.

One virtue of focusing on impacts for assignees in this study has been to highlight what

the program accomplished for those who received its most important services. Although, overall, JOBS did not produce statistically significant impacts by the end of clients' third year of program exposure, the program did have positive effects for clients receiving certain E&T assignments. In particular, impacts were positive for job club assignees and early assignees to post-secondary programs and job-readiness. On the other hand, impacts for clients assigned to basic education and CWEP were more discouraging.

The time required for impacts to emerge clearly varies for different types of assignments. Further analysis is needed to determine how much of this variability is due to the fact that more disadvantaged clients tended to receive particular types of assignments, and how much to the fact that some activities (e.g., basic education) are inherently more time intensive than others (e.g., job readiness). In view of the embryonic state of knowledge about what works in JOBS, policy makers should be humble in assessing government's capacity to provide the necessary services and supports required to enable most welfare clients to become self-sufficient in a fixed time period.

CHAPTER ONE

INTRODUCTION

The Job Opportunity and Basic Skills Training (JOBS) Program and related provisions of the 1988 Family Support Act (FSA) require states to offer recipients of Aid to Families with Dependent Children (AFDC) a wide array of new services aimed at fostering self-sufficiency. At the heart of these new services is the requirement that all AFDC clients covered by the program have their employability assessed and participate in JOBS employment and training (E&T) activities.

Within broad guidelines, states have considerable flexibility in implementing JOBS' employment and training requirements. The Federal rules specify certain activities that each state's JOBS program must offer.¹ The rules also specify several standards for clients' participation in JOBS activities which states must meet in order to qualify for the full Federal financial match.² However, state JOBS programs can be structured in many ways and still meet these requirements (Lurie and Hagen 1993). As a result, AFDC clients in different states are likely to experience quite different JOBS activities.

The purposes of this report are to describe the JOBS assignments received by clients in Ohio's JOBS program and estimate their impacts on clients' employment and earnings. This research is part of a broader evaluation of the implementation, impacts, and cost-effectiveness of JOBS in 15 Ohio counties between 1989 and 1992.³ The evaluation uses a random assignment design to provide rigorous estimates of the program's overall impacts. These impacts pertain to the effects of JOBS on all clients who were *supposed to be* assessed and participate in employment and training (E&T) activities according to Federal rules, regardless of whether

¹ States must offer education activities; job skills training; job readiness activities; and job development and placement services. States also must offer at least two of the following four activities: job search; on-the-job training; work supplementation programs; and community work experience programs.

² In particular, the rules specify minimum percentages of clients who must be enrolled in JOBS activities in successive fiscal years. The rules also specify that at least 55 percent of JOBS funds must be spent on clients from certain target groups.

³ Implementation of Ohio's JOBS program is described in reports by Hollenbeck et al. (1990), Lewis et al. (1991), and Lewis and Kurth (1992). Final impact findings are summarized in Fein et al. (1994).

they *actually* participated. As such, the impacts provide an accurate gauge of how this broad coverage program performed as implemented. The experimentally-based impact estimates are not, however, directly informative about the effectiveness of different kinds of JOBS services.

A first important step in assessing the role of E&T in generating observed net impacts is to describe the extent and nature of participation that occurred. In Chapter 2, we describe several key aspects of JOBS assignment patterns in Ohio. One question explored is how many JOBS-mandatory clients actually received E&T assignments. Although all clients who are not exempt under Federal rules are supposed to participate in JOBS activities, in practice states only needed to meet modest participation rates to qualify for the full Federal financial match. This gap between theoretical and actual participation requirements reflects Congress' recognition that initial JOBS funding levels were too low to achieve full participation. It is important to document the participation rates that actually were achieved in Ohio.

A second important issue concerns the mix of different E&T assignments clients received. The nature and time-intensiveness of activities offered in Ohio's JOBS program vary greatly. At one extreme lie intensive activities directed towards improving human capital (e.g., basic and post-secondary education, job skills training); at the other lie work-oriented activities (e.g., work experience and job search). Overall E&T impacts could be affected by the numbers and types of clients assigned to different activities.

A third aspect of E&T participation affecting impacts is the dynamics of E&T participation over time. Unlike many earlier programs built around a single activity or fixed sequence of activities, JOBS' participation requirement remains in effect as long as clients remain on AFDC and mandatory. The cumulative time clients spend in each activity and the extent to which they receive assignments of different kinds have important implications for the timing and size of impacts.

There currently is little descriptive information about issues such as these, either for Ohio or elsewhere. This deficit may partly reflect the Federal reporting emphasis on measuring participation cross-sectionally (i.e., for all mandatory participants during a given calendar period

of time).⁴ It also doubtless reflects the need for better data systems and analytic support for state JOBS programs.

If there is little descriptive information about patterns of participation in JOBS activities, there is even less knowledge about the effectiveness of different E&T strategies. In Chapter 3 we provide an analysis of impacts on employment and earnings for clients assigned to specific E&T activities, including job club (Ohio's job search component), basic education, post-secondary education and skills training, job readiness, and the Community Work Experience Program (CWEP). Before examining the findings, the remainder of this chapter gives necessary background on the Ohio JOBS demonstration.

1.1 HISTORY AND ADMINISTRATION OF OHIO'S JOBS PROGRAM

Ohio first operated mandatory work programs for recipients of AFDC -- or Aid to Dependent Children (ADC), as the program is titled in Ohio -- under WIN demonstration authority provided in the Omnibus Budget Reconciliation Act of 1981. The Ohio Work Programs mainly emphasized community work experience, but also included job search, education and training, and subsidized employment components. The program reportedly achieved high CWEP participation levels (Schiller and Brasher 1993).

The State revamped its ADC work program in 1988, under authority of a waiver granted by the White House Low Income Advisory Board. The resulting program -- Fair Work -- preceded but was very similar to JOBS. Fair Work required clients to be assessed and to participate in one of a variety of employment and training activities. Exemptions from participation were granted under circumstances similar to those in the JOBS program.⁵

⁴ With reporting requirements likely to shift from participation- to outcome-based performance standards in the next few years, we expect attention increasingly will move to the experiences of clients as they move through time. Such a change also is likely to flow from any efforts to impose time limits on both JOBS and AFDC eligibility, which will require explicit attention to cumulative program experience.

⁵ One difference was that under Fair Work, single parents were exempted if they had children under age six, whereas the youngest child must be under three (or, at state option, age one) to qualify clients for an exemption under JOBS. Another was that one parent in two-parent (ADC-U) was generally exempted, whereas JOBS requires participation from both parents unless they meet some other exemption.

In the fifteen counties selected to conduct a random assignment evaluation of Fair Work, the program began during the first six months of 1989. After July 1989, a series of adjustments made the program nearly identical to JOBS.⁶

Generally, states with experience administering complex, large-scale work programs might be expected to have an edge in implementing JOBS with a minimum of difficulty. Responsibility for administering JOBS in Ohio is largely left to county departments of human services (CDHSs), however, and those counties participating in the JOBS demonstration were selected precisely because they had not operated Ohio Work Programs. On the other hand, most of the demonstration counties did have longstanding experience with a program similar to CWEP for general assistance recipients (Hollenbeck et al. 1990).

1.2 THE JOBS DEMONSTRATION

As a condition of the original federal waiver, the State was required to have its mandatory program rigorously evaluated. Mandatory ADC clients in fifteen counties were randomly assigned to treatment and control groups at a nine-to-one ratio.⁷ Random assignment occurred at the point that clients first were to have been referred to county work programs. Subsequently, only members of the treatment group were referred, notified to come in for orientation and employability assessment, or assigned to JOBS activities. Over the three years of demonstration enrollment (1989-91), about 73 thousand clients underwent random assignment.

Program impacts are estimated by comparing average outcomes of interest (e.g., ADC receipt, earnings) for members of the treatment and control groups at successive intervals after random assignment. The estimated impacts reflect the net effects of both participation and nonparticipation for members of the treatment group, since, as we will see, many sample members never received JOBS assignments. Observation continued until the demonstration ended in December 1992.

⁶ Fair Work's exemption for a youngest child between the ages of 3 and 5 was not eliminated until July 1991. Extended Medicaid and child care provisions were not implemented until April 1990.

⁷ The fifteen counties were Brown, Champaign, Clermont, Franklin, Lake, Lawrence, Montgomery, Perry, Pickaway, Richland, Seneca, Stark, Summit, Trumbull, and Wyandot.

The demonstration counties account for approximately 32 percent of the State's total ADC caseload, covering a mixture of urban and rural counties that resemble the entire state. The characteristics of ADC recipients in Ohio also are reasonably similar to those for welfare clients nationwide. For example, in 1991 average case size was 2.9 for both Ohio and the entire nation; the maximum benefit for a family of three was \$334 in Ohio, compared with \$372 in the median state; and 39 percent of the Ohio caseload was black, compared with 40 percent for the nation as a whole (Committee on Ways and Means 1992). From 1989 to 1991, the AFDC caseload nationally grew somewhat faster (15 percent) than Ohio's (8 percent), perhaps because Ohio's economic situation worsened at a slower rate than the nation's as a whole (as indicated by unemployment rates).

1.3 JOBS PROGRAM MODEL AND ACTIVITIES

Of the two generic JOBS program models identified by Gueron and Pauly (1991), Ohio's program is closer to the "up-front assessment" approach than to a "fixed-sequence" model. During the assessment process, all clients who are not formally exempt under the JOBS program guidelines are interviewed, and their basic skills measured using standard tests.

Assessment interviewers concentrate, first, on identifying "barriers" to employment, such as health problems or the unavailability of transportation or child care needed to participate in JOBS. Clients with such barriers are temporarily excused from participation and may be referred to remedial services (e.g., substance abuse treatment). Interviewers then ascertain clients' education, work histories and occupational interests. This information becomes the basis for the development of an "employability plan" for each client, the specifics of which are arrived at through varying contributions of caseworker discretion, client preferences, and available placement resources.

Although JOBS staff have considerable latitude in individual situations, their decisions in the aggregate are heavily influenced by State program guidelines, which, in turn, reflect the emphases in the FSA on basic education, and appropriate services for some client categories. The effect is that clients typically are sorted into two groups during assessment: those with and those without a high school diploma or its equivalent. The latter are encouraged to enroll in a

basic education activity, such as adult literacy, adult basic education, or GED preparation classes. Clients with a high school diploma equivalent and work experience normally are referred to job club, Ohio's job search program for JOBS. Those with a high school diploma equivalent but little work experience are typically assigned to a CWEP site.

The flexibility in Ohio's program is manifest in the frequency of deviations from the above model. Clients already enrolled in a post-secondary education program or wishing to enroll in job skills or post-secondary training often are assigned to these activities rather than job club. Clients who are reluctant to enter a basic education activity often are sent to a CWEP assignment instead. CWEP also is used to "take up the slack:" when preferred job skills or other placements are unavailable, clients do not find jobs through job club, or a current assignment does not meet the 20 hour/week participation standard.

Such were the general processes governing JOBS assignments in Ohio between 1989 and 1992. In Chapter 2, we trace the assignment patterns resulting from these processes. In Chapter 3, we estimate employment and earnings impacts for clients assigned to each JOBS activity; for all clients assigned to any activity; and for all clients never assigned to an activity. We summarize our overall conclusions in Chapter 4.

CHAPTER TWO

FINDINGS ON ASSIGNMENTS TO JOBS ACTIVITIES

In this chapter, we present detailed statistics on JOBS assignments in Ohio. One set of statistics summarizes assignments to JOBS activities for calendar years 1989 through 1992 for all clients who were "JOBS-mandatory," that is, who did not qualify for an exemption under the Federal JOBS rules. We present these calendar period assignment rates in Section 2.2 after a brief section on measuring JOBS participation.

Another set of statistics looks at JOBS assignments over time for different "demonstration entry cohorts" -- groups of clients who first became JOBS-mandatory in different years. Findings pertaining to the timing and nature of clients' first JOBS assignments are presented in Section 2.3, which is followed, in Section 2.4, by an explanation of the subsequent dynamics of JOBS assignments.

2.1 MEASURING JOBS PARTICIPATION

Participation in JOBS activities can be measured in at least two different ways. One approach considers the number of clients participating *during a given time period*. The other measures participation *for a given group of clients over time*.

Federal JOBS participation standards embody the first approach, which can be termed a "period" perspective. In order to receive the maximum allowed Federal matching funds, states must enroll specified percentages of non-exempt ADC clients in JOBS activities in successive fiscal years. The specified percentages and methods of calculating them differ for clients in the general caseload and (starting in fiscal year 1994) those in unemployed parent cases, as will be described shortly.

The Federal approach to measuring participation rates provides a useful summary of JOBS program "effort" during different time periods. However, period rates are not so informative about what participation means from a client perspective, where what matters is what occurs to individuals through time. Client-oriented analyses require measures which summarize the unfolding program experiences of groups of clients.

This report provides some data on period participation rates, but its main focus is on participation from the second, or "client cohort," perspective. The emphasis on client participation over time is consistent with analyses later in this report of the impacts of JOBS participation on clients' employment and earnings. In these analyses, we will be estimating impacts for cohorts of clients as they move through time.

The term "cohort" is used here to describe a group of clients who became subject to JOBS in the same year. The point at which a client first became subject to mandatory JOBS participation is defined operationally as the time she or he first was identified as "required" in the State's automated client registration system and lived in a county which had implemented JOBS.¹

It should be stressed that this is the moment in which clients first became subject to JOBS only *in theory*. Although State procedures specified that clients were to be informed about the program and referred to the JOBS program office, local offices were not always able to meet this requirement on a timely basis.

Most of the detailed client cohort-focused analyses in this report are based on a random sample of 12,556 treatment group clients who first became subject to JOBS in either 1989 (7,773 clients) or 1990 (4,783 clients). Clients from the 1991 cohort are not included in these analyses, since the demonstration's ending in December 1992 restricted the time for which this cohort could be observed to about one year. Analysis of period participation rates do include a random sample of 13,581 clients from the 1991 cohort.²

Data provided by the State allowed us to identify the beginning and ending dates of each period that clients were JOBS-mandatory and, within these periods, the beginning and ending

¹ This moment also corresponds to the effective point of random assignment in the Ohio JOBS demonstration, when clients were assigned to either the treatment or control group. Some counties implemented JOBS earlier for some than for other parts of the caseload. In these counties, clients had to be required and in a portion of the caseload for which JOBS was implemented in order to enter the demonstration.

² The population for the analysis of period rates is completely representative of the JOBS-mandatory caseload in 1989-91. However, period rates estimated for 1992 exclude clients newly-mandatory in that year, since enrollment in the JOBS demonstration ended in 1991.

dates for each JOBS assignment.^{3,4} Because caseworkers did not always record activity end dates on a timely basis, both cohort and period measures based on time in assignments (e.g., Exhibits 1, 2, 6, and 9) may have an upwards bias. On the other hand, various measures of ever-assignment (Exhibits 3, 4, 5, 7, and 8) are not affected by end date recording problems.

In interpreting findings, it is important to emphasize that the data represent spells of assignment to JOBS activities, rather than spells of actual program participation. The time clients spend assigned to program activities may exceed the time they actually participate in these activities, if they fail to report to assignments as scheduled.⁵

2.2 PERIOD PARTICIPATION RATES

Federal JOBS rules specify how JOBS participation rates are to be measured for determining states' eligibility for full Federal financial participation. One measure applies to participation standards for the general ADC caseload; the other applies to two-parent families.

Of non-exempt clients in the general caseload, states must enroll an average of at least 7 percent in JOBS activities during fiscal years 1990 and 1991; 11 percent in 1992 and 1993; 15 percent in 1994 and 20 percent in 1995. Participation standards also specify that at least 40 percent of two-parent families have at least one adult enrolled in a JOBS work activity beginning in fiscal year 1994, rising to 75 percent by 1997.

In this section we look at participation rates between 1989 and 1992 for clients in our 1989-91 cohorts. Our purpose is to document the general level of participation achieved and identify some possible reasons for non-participation. We also comment on the extent to which

³ The file also contained data on assigned hours and education and training outcomes, but these were judged to be insufficiently uniform in quality for purposes of the present analysis. The file also contained data on a limited number of client characteristics, which are used in this analysis.

⁴ Here, and throughout the report, we use the terms "mandatory" and "non-exempt" interchangeably to refer to ADC clients who were required to participate under Federal rules; that is, they were not exempt under one of the official criteria. Federal rules exempt clients from JOBS participation due to illness, the need to care for a young child, and other reasons.

⁵ Although we have not rigorously examined this issue, a client sample survey suggests that our measures of ever-assignment approximate ever-participation reasonably closely, whereas impressionistic data suggest that assignment durations overstate the amount of participation to varying degrees across activities. Attendance problems were noted most frequently for CWEP and basic education (Lewis and Kurth 1992, 1993).

participation met the Federal standards to the extent that we believe the data support such evaluation.

Our method of computing participation rates differs somewhat from that prescribed in the Federal rules. Our denominator is the average number of months clients were JOBS-mandatory during each calendar year, and our numerator is the average number of months in which clients were assigned to substantive JOBS components.⁶ The specified Federal participation rates are more restrictive in that they limit clients counted in the numerator to those whose combined assignment hours averaged at least 20 hours per week and who actually were participating in activities for at least 75 percent of their scheduled hours. However, the Federal rules are less restrictive than our rates in that they allow several activities besides JOBS components to be counted in the numerator (e.g., first assessments and employment following a JOBS activity) and exclude clients under sanction from the denominator.

Overall JOBS assignment rates rose from 6 percent in 1989 to 21 percent in 1990, fell to 17 percent in 1991, and then rose again to 25 percent in 1992. Exhibit 1 summarizes these assignment rates. Assignment rates were low for 1989 as counties just implementing their JOBS programs faced large backlogs of existing clients who needed to be processed. The drop in 1991 reflects processing backlogs generated by the enrollment in Franklin County of a large number of existing ADC-R clients, whose participation had been deferred until this time.

As noted previously, our method of calculating participation rates differs from the Federal method in ways which are likely to impart offsetting positive and negative biases. Given these differences, our estimates are quite close to the "official" 19 percent Ohio participation rate reported to the Department of Health and Human Services for FY 1992 (Employment and

⁶ Only one activity at a time was allowed to count towards each client's monthly participation, but the calculation was performed in terms of days. Thus, if a client spent 50 days during the year in one activity and 50 in another, but 10 of the days were concurrent, we calculated the number of months that client contributed to the mean as:

$$\text{Months of Participation} = (50 + 50 - 10) / (365.25 / 12).$$

"Days" here includes the total number of calendar days between the scheduled beginning and ending days of each assignment, regardless of the number of required hours of participation.

Exhibit 1

**Percent of JOBS-Mandatory Clients Assigned to Employment
and Training Activities in Successive Calendar Years**

Year	All Clients	Single-Parent (ADC-R) Clients	Two-Parent (ACD-U) Clients
1989	6.4%	5.1%	8.4%
1990	21.1	22.6	19.1
1991	16.8	15.5	20.0
1992	25.4	25.8	24.7
Number of Clients^a	26,137	17,570	8,567

^a Number ever mandatory during the entire 1989-91 demonstration entry period. Smaller number of clients ever mandatory by the end of 1989 and 1990, respectively, were used to calculate 1989 and 1990 assignment rates.

Training Reporter 1993, p. 958).^{7,8} Both sets of figures suggest that Ohio exceeded the Federal JOBS participation requirements for the general mandatory caseload.⁹

The fact that a majority of clients was never assigned to JOBS activities throughout the study period is due partly to limited program resources and partly to intentional deferral. Resource-related delays in processing clients may have the positive consequence of weeding out clients with less need for services. Findings from the process study suggest that client backlogs were a chronic feature of the early years of Ohio's JOBS program. Resource constraints also inhibited monitoring and follow-up of individual clients who did not appear for scheduled interviews. Although most counties systematically worked through their backlogs in an attempt to serve every mandatory client, there typically were lengthy delays between referral to the JOBS program, notification to appear for assessment, assessment, and assignment. Lewis and Kurth (1992) estimate that lags for clients who eventually were assigned to JOBS activities were substantial: many clients left welfare before they could be assigned to activities.

Non-participation in JOBS components does not necessarily indicate lack of program capacity to process mandatory clients. Participation was deferred for many assessed clients because they were "not job ready" or employed part-time, and some were placed in "pending assignment" status because an appropriate slot was not available. Other clients, who did not appear for assessment as required, were sanctioned in accordance with program rules. Unfortunately, JOBS data on such events were not recorded consistently enough over the period covered by this report to analyze the relative importance of these different causes of non-participation.

⁷ Unlike the statewide figure, our 25-percent participation rate for calendar year 1992 excludes clients who first became JOBS-mandatory in 1992, since these clients did not undergo random assignment. Including the latter presumably would have decreased the overall average, given the likelihood of continuing lags in referral, assessment, and assignment.

⁸ As noted above, lags in recording the end date of an activity likely imparted an upward bias to the assignment rates reported in Exhibit 1. However, the same biases were affecting participation rates reported by the State during this period, which were based on the same type of data extract as the one used here.

⁹ Federal rules require that clients assigned to activities must attend at least 75 percent of their scheduled hours to count towards the participation standards. We have not seen attendance data for Ohio JOBS assignments. However, qualitative information from our process study suggests that attendance problems were common during the study period, especially for assignees to basic education and CWEP (Lewis and Kurth 1992).

Delays in assigning mandatory clients to activities could have some positive effects. During the wait to assignment, many clients left welfare on their own. Such clients presumably had relatively less need for JOBS services. Hence, serving only those remaining on ADC long enough to receive assignments may represent an effective strategy for targeting program resources. For similar reasons, at least one expert has even suggested that it would be good national policy to delay JOBS assignments for one year in a transitional welfare system (Greenberg 1993).

Assignment rates for clients from one and two-parent cases were generally similar from 1989 to 1992. Exhibit 1 shows that the overall assignment rate for JOBS-mandatory ADC-U clients in 1992 (25 percent) was nearly identical to that for clients in ADC-R cases (26 percent). On first look, the finding that only a quarter of ADC-U clients was assigned would seem to imply that, as of 1992, Ohio was quite far from meeting the 40-percent standard for two-parent families due to take effect in fiscal year 1994.

However, the percentage of ADC-U cases with at least one JOBS participant could be substantially higher than the percentage of ADC-U clients who participated. If both adults in every case were mandatory -- and their participation probabilities were independent -- a 25-percent client participation rate would imply that 44 percent of cases contained at least one participant.¹⁰ If only 1.5 adults were mandatory in the average case, the case participation rate would be 34 percent. Because we randomly sampled clients -- rather than cases -- for this analysis, we cannot estimate the average number of mandatory clients per ADC-U case. If, as is likely, the figure is 1.5 or greater, 1992 assignment rates for two-parent cases may not have been far from the 40-percent threshold.

Clients from two-parent cases were more likely than those from single-parent cases to be assigned to "work activities." Federal rules require at least one parent from unemployed parent cases to be assigned to a "work activity" (work experience, on-the-job training, or other State-designed work program approved by HHS) for at least 16 hours per week. Clients from

¹⁰ The probability of the first parent participating is .25. The probability that the first parent doesn't participate but the second does is .75 (the probability the first doesn't participate) times .25 (the probability that the second does), or .19. The probability that either the first or second parent in a case, or both, participates therefore is $.25 + .19 = .44$.

two-parent cases who are under age 25 and do not have a high school diploma equivalent may be required to participate in basic education in lieu of a work activity, and do not have to meet the 16-hour requirement. These rules were in effect from the beginning of JOBS, although program rules did not stipulate any penalties for non-compliance until fiscal year 1994.

CWEP was the only numerically significant component which qualified as a "work activity" in the demonstration counties from 1989 to 1992. Exhibit 2 shows that during 1992, clients from two-parent cases were more likely than those from single-parent cases to be assigned to CWEP. ADC-U clients spent 32 percent of their total assigned months in CWEP, whereas ADC-R clients spent only 21 percent. In contrast, ADC-U clients spent 28 percent of their months in basic education, compared with 34 percent of ADC-R clients.

Given that the overall participation level for ADC-U cases was, at best, fairly close to 40 percent in 1992, the figures for CWEP and basic education assignments suggest that the percentage of two-parent cases with a qualifying assignment was substantially less than 40 percent. Further case-level analysis would be needed to estimate the exact extent of any shortfall from the participation standard.

2.3 FIRST JOBS ASSIGNMENTS

JOBS emphasizes a wider range of activities than earlier work-welfare programs; gives more discretion to both clients and caseworkers in choosing assignments; and represents a continuing, rather than a one-time, involvement for clients. These important features of the program suggest that in order to fully appreciate the sources of any impacts we observe, we must first understand something about the nature, timing, and sequencing of assignments received by different kinds of clients. Despite the importance of this subject, there currently is little data on clients' JOBS experiences over time either for Ohio or the nation as a whole.

First assignments provide a useful starting point for understanding JOBS experiences. Such assignments are worth describing in detail since they summarize the outcome of the assessment process and may represent the most important -- or the only -- JOBS employment and training activities many clients will have. This section considers several basic characteristics

Exhibit 2

**Percent of Total 1992 Assignment Months Spent
In Different JOBS Activities**

Activity	Single-Parent (ACD-R) Clients	Two-Parent (ACD-U) Clients
Job Club	4.4%	5.3%
Basic Education	33.6	28.4
Post-2nd Education	27.9	21.6
Job Skills	2.8	2.7
Job Readiness	9.9	9.2
CWEP	21.2	32.3
Other	.2	.4
All Activities	100.0	100.0
Number of Clients	17,812	8,602

of clients' first JOBS assignments. Subsequent sections will cover the dynamics of first and subsequent assignments over time.

Attention here -- and in the remainder of this report -- shifts from the period perspective to the client cohort perspective. Analysis in this chapter will be confined to members of the 1989 and 1990 cohorts, all of whom could be observed for at least two years.

Nearly forty percent of clients eventually were assigned to a JOBS employment or training activity. Three years after they first became JOBS-mandatory, 38 percent of 1989 cohort members had been assigned to at least one JOBS activity. Exhibit 3 suggests that clients in the 1989 cohort initially were assigned to activities at a slower rate than those in the 1990 cohort, a fact probably due to extra processing lags associated with program start-up in 1989.

However, a somewhat higher percentage of 1989 than of 1990 cohort members eventually was assigned. One possible explanation is that a higher percentage of 1989 than 1990 cohort members remained on ADC long enough to receive an assignment. This explanation is plausible in light of the fact that a majority (54 percent) of members of the 1989 cohort already had been on welfare for three years or longer by the point they first became subject to JOBS, whereas nearly three-quarters (74 percent) of members of the 1990 cohort were either new ADC recipients or had been on assistance for less than a year.

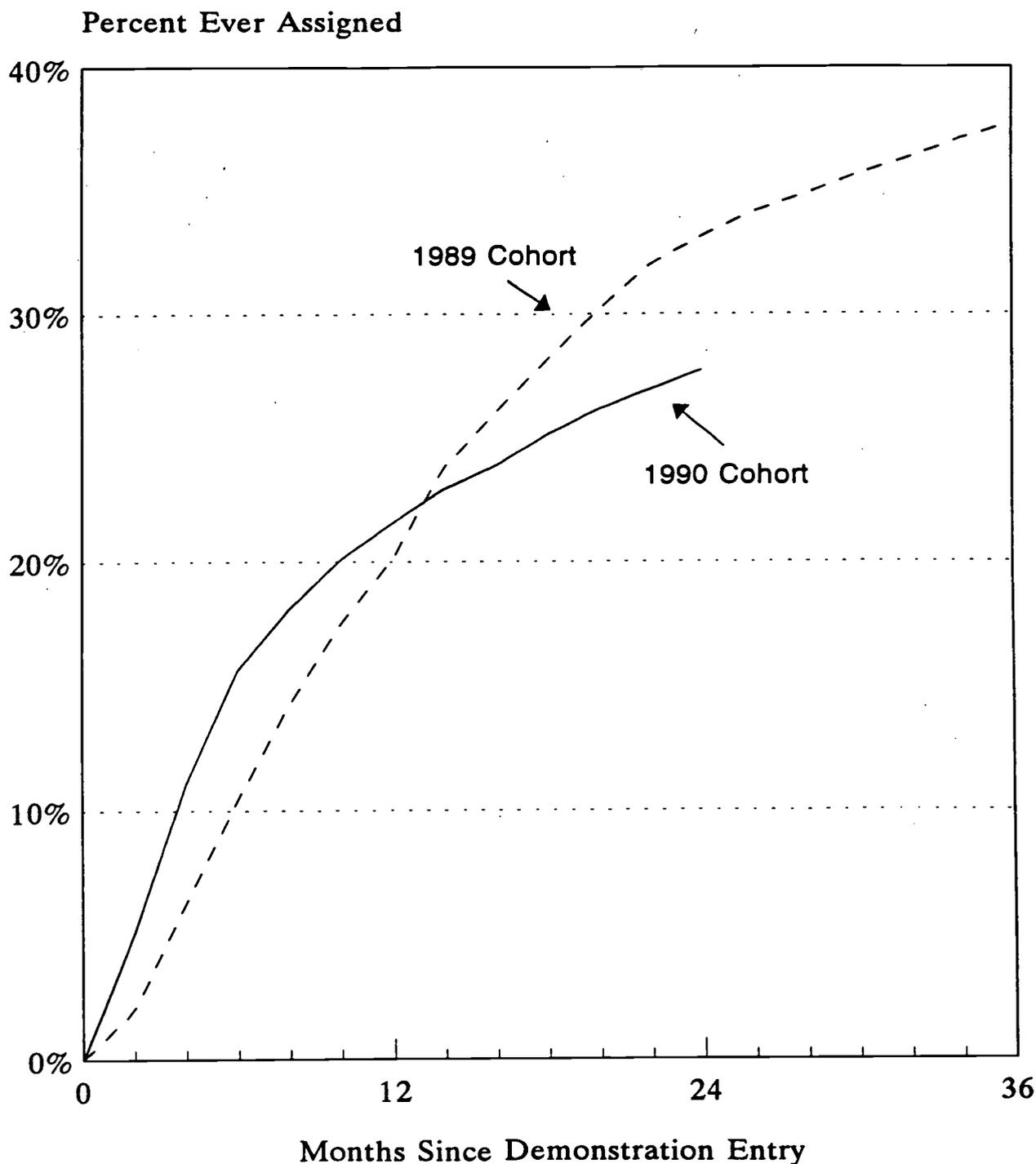
The exhibit indicates the slow pace of assignments to JOBS activities. Forty-two percent of observed first assignments for the 1989 cohort occurred more than a year after clients first became JOBS-mandatory.

An important consequence of the lengthy interval to assignment is that many clients could be expected to leave ADC -- or obtain a formal exemption from JOBS -- before they could be assigned. Nationwide, 48 percent of clients leave welfare within two years of coming on it (Committee on Ways and Means 1992). Our data show that more than half of clients who never were assigned to activities had either left ADC or obtained an exemption sometime during their first year after becoming JOBS-mandatory.¹¹ In light of these dynamics, the percentages of clients ever assigned to activities appears reasonably high.

¹¹ Fifty-three percent of the 1989 cohort and 63 percent of the 1990 cohort either left ADC or obtained an exemption within a year after first becoming JOBS-mandatory.

Exhibit 3

Cumulative Percent of Clients Ever Assigned to JOBS Activities by Months Since Demonstration Entry



First JOBS assignments evidence a strong emphasis on intensive educational activities as well as a vigorous CWEP component. Also noteworthy is significant use of post-secondary educational assignments. Exhibit 4 reveals that education and training activities accounted for 50 percent of first assignments for the 1989 cohort and 61 percent for the 1990 cohort.¹² The most significant education and training categories were basic education (including ABE, GE preparation, and ESL) and post-secondary programs.

The Ohio assignment patterns thus clearly evidence a serious effort to embrace JOBS's emphasis on intensive educational activities. A distinctive aspect of this emphasis is the fact that post-secondary activities represent an important share -- about a quarter -- of all first assignments to education and training. As post-secondary education is optional in the Federal JOBS rules, the State's significant use of this activity constitutes further evidence of a strong commitment to intensive investments in human capital.

The increase in first assignments to education and training across cohorts came at the expense of CWEP, whose share shrunk from 34 percent to 23 percent of first assignments. Even among the 1990 cohort, Ohio's use of CWEP exceeds that of most states. Ohio's experience thus may be highly relevant to current welfare reform plans which move clients into public service jobs after a period of education and training.

Clients assigned to different first activities had quite different characteristics. In general, a high degree of targeting seems to have been achieved. Not all of this targeting may have been intentional, however. Through the assessment process, caseworkers and clients develop individualized "employability plans" which match clients' needs to appropriate JOBS activities and services. As described earlier, the process study found that clients' educational attainment, work experience, and preferences are the most important factors determining assignments.

Clients without a high school diploma or equivalent ordinarily are assigned to an appropriate educational activity (GED, ABE, literacy tutoring, or ESL) -- unless they object, in which case they will be assigned to CWEP. Clients with a diploma but little work experience

¹² About four percent of all first assignments involved "ties," where two concurrent assignments were scheduled to begin on the same day. For purposes of this analysis, in these instances one of the two assignments was randomly chosen to be the "first" assignment.

Exhibit 4

**Percent of Clients Receiving Different
First JOBS Assignments by Cohort^a**

Type of First Assignment	Cohort	
	1989	1990
Job Club	16.1%	15.7%
Education and Training		
Basic Education	23.7	28.4
Post-2nd Education	13.3	16.8
Job Skills	1.9	3.8
Job Readiness	8.0	11.2
Other E & T	2.9	1.1
CWEP	33.7	22.5
Other	.3	.4
Total	100.0	100.0
Number of Ever Assigned Clients	2,927	1,326

^aChi-squared test indicates that first assignment distributions are significantly different for the two cohorts at the 99-percent confidence level.

may be assigned to CWEP or to a skills training or post-secondary education program. Clients with both diploma and recent work experience normally are assigned to job club, unless they already are enrolled in a post-secondary education program or express interest in further skills training.

The State's emphasis on basic education for clients without a high school diploma or equivalent is consistent with the emphasis in Federal JOBS rules on basic education. The Federal rules also include important incentives for concentrating program resources on clients at the greatest risk of long-term dependency. States must spend 55 percent of their JOBS program funds on certain client target groups or face a reduced Federal match.

The statistics in Exhibit 5 suggest both that relatively disadvantaged clients were being targeted for JOBS participation and that, among assignees, there was a reasonable degree of differentiation according to clients' needs.¹³ Two of the characteristics appearing in the table's left-most column are indicators of degree of economic disadvantage -- time since clients first received ADC and earnings for the year before demonstration entry.¹⁴

Clients with long histories of prior welfare receipt are likely to average longer durations of receipt in the future. Exhibit 5 shows that whereas 36 percent of clients never assigned to a JOBS activity were "long-time" ADC recipients (clients whose first ADC receipt occurred three years before they entered the demonstration), percentages of long-timers among clients ever assigned to JOBS activities ranged from 42 to 57 percent. Percentages of long-time recipients -- who may be assumed to have the greatest needs for basic education and work experience -- were higher for clients first assigned to basic education (54 percent) and CWEP (57 percent) than for clients first assigned to other activities.

Clients with recent work experience can be assumed to be less at risk of long-term dependency than those without recent work experience. Work experience is measured in Exhibit 5 by the presence of earnings in the year preceding demonstration entry. On average,

¹³ The characteristics shown in the exhibit were measured as of the point of clients' demonstration entry. This is to ensure that differences observed preceded assignments rather than being caused by them.

¹⁴ Unfortunately, education and JOBS target group status -- two important measures of disadvantage -- were not recorded completely enough in the JOBS data to support analysis.

Exhibit 5
Client Characteristics at Baseline^a
by Type of First JOBS Assignment:
1989 and 1990 Cohorts

Characteristic	Clients First Assigned to						Clients Never Assigned
	Job Club	Basic Education	Post-2nd Education	Job Skills	Job Readiness	CWEP	
Case Type							
Single-Parent	47.7%	59.7%	70.6%	54.2%	62.4%	54.6%	55.4%
Two-Parent	52.3	40.3	29.4	45.8	37.6	45.4	44.6
Age							
< 20	.4%	2.9%	2.0%	2.8%	1.8%	1.6%	8.2%
20 - 29	37.2	41.6	38.7	37.4	29.5	31.9	38.4
30 - 39	46.9	42.9	49.3	51.4	48.8	47.8	38.1
40+	15.4	12.5	10.1	8.4	19.8	18.7	15.4
Race							
White	71.3%	76.8%	76.5%	78.4%	57.8%	84.6%	75.7%
Nonwhite	28.7	23.2	23.5	21.6	42.2	15.4	24.3
Months Since First Received ADC							
New Client	35.6%	26.5%	30.2%	41.2%	41.7%	22.9%	39.0%
1 - 11	7.9	8.6	8.7	13.1	6.0	7.3	12.0
12 - 23	5.1	4.1	6.2	1.9	3.1	4.7	6.1
24 - 35	6.8	6.3	5.2	2.8	5.3	8.2	7.1
36+	44.5	54.5	49.7	42.1	43.8	56.9	35.8
Earnings for Prior Year							
None	55.9%	66.7%	58.9%	59.8%	47.8%	71.0%	57.1%
< \$2K	18.5	17.7	17.9	13.1	19.3	14.2	18.4
\$2K - 4K	10.9	8.0	11.1	10.3	12.5	7.3	11.0
\$5K - 9K	8.2	5.3	8.0	.5	4.9	5.8	8.4
\$10K+	6.5	2.3	4.1	12.2	7.8	1.7	5.1
Avg. Total Earnings	\$2,011	\$1,087	\$1,693	\$2,478	\$2,658	\$1,005	\$1,881
Number of Clients	680	1,071	613	107	383	1,284	8,303

^a Baseline is defined as the time clients first were to be referred to the JOBS program.

^b Chi-square tests indicate that type of first assignment is associated with all characteristics at the 99-percent confidence level. However, differences in characteristics between any two specific types of first assignment may not be statistically significant.

clients assigned to at least one JOBS activity were slightly less likely to have had earnings (37 percent across all activities) than those who were never assigned (43 percent).

Average total earnings for the year before demonstration entry varied considerably with the type of first JOBS assignment. Average earnings were close to \$1,000 for clients assigned to basic education and CWEP, compared with earnings in the mid-\$2,000's for those assigned to job skills and job readiness activities. Earnings may be relatively low (\$1,693) for clients assigned to post-secondary education activities -- presumed to be among the more advantaged members of the caseload -- because many were in school during the year prior to demonstration entry.

Whereas evidence from the process study suggests that the process of matching clients with differing needs to different assignments was quite deliberate, it is likely that the initial selection of clients to be assigned was at least partly inadvertent. Identification and recording of target group membership appears to have been highly inconsistent over much of the period, suggesting that target group membership was only one basis for prioritizing the backlog of clients awaiting services.¹⁵

Lengthy delays imposed by the backlogs themselves may have influenced targeting, by allowing advantaged clients time to leave ADC before they would have been assessed or assigned. Whether or not targeting was achieved deliberately, the results were consistent with the Federal targeting goals.

2.4 DYNAMICS OF JOBS ASSIGNMENTS OVER TIME

In this section, we shift our attention from circumstances surrounding the start of the first assignment to subsequent program experiences. First, we describe the typical duration of first assignments, and consider some of the reasons why they end. Then, we look at the extent and nature of subsequent assignments. Finally, we assess cumulative experience in JOBS assignments.

¹⁵ ODHS staff report that identification of target group members improved in 1993.

Lengths of first assignments varied greatly depending on the type of assignment. One factor influencing JOBS's capacity for increasing self-sufficiency is the intensiveness of program assignments, and one important dimension of intensiveness is the duration of assignments. Exhibit 6 shows the percentages of clients still in their first activities in successive months after the assignments were made. The exhibit combines first assignments for members of the 1989 and 1990 cohorts.

The top two lines in the chart show that the longest assignments were to basic and post-secondary education, whereas the shortest were to job club.¹⁶ Six months after first being assigned to job club, only 13 percent of clients were still in this activity. However, about two-thirds of those first assigned to basic and post-secondary educational activities were still in these assignments six months later, and more than one in four were still assigned after 12 months. Intermediate assignment lengths are evident for assignees to CWEP, job readiness, and job skills activities.¹⁷

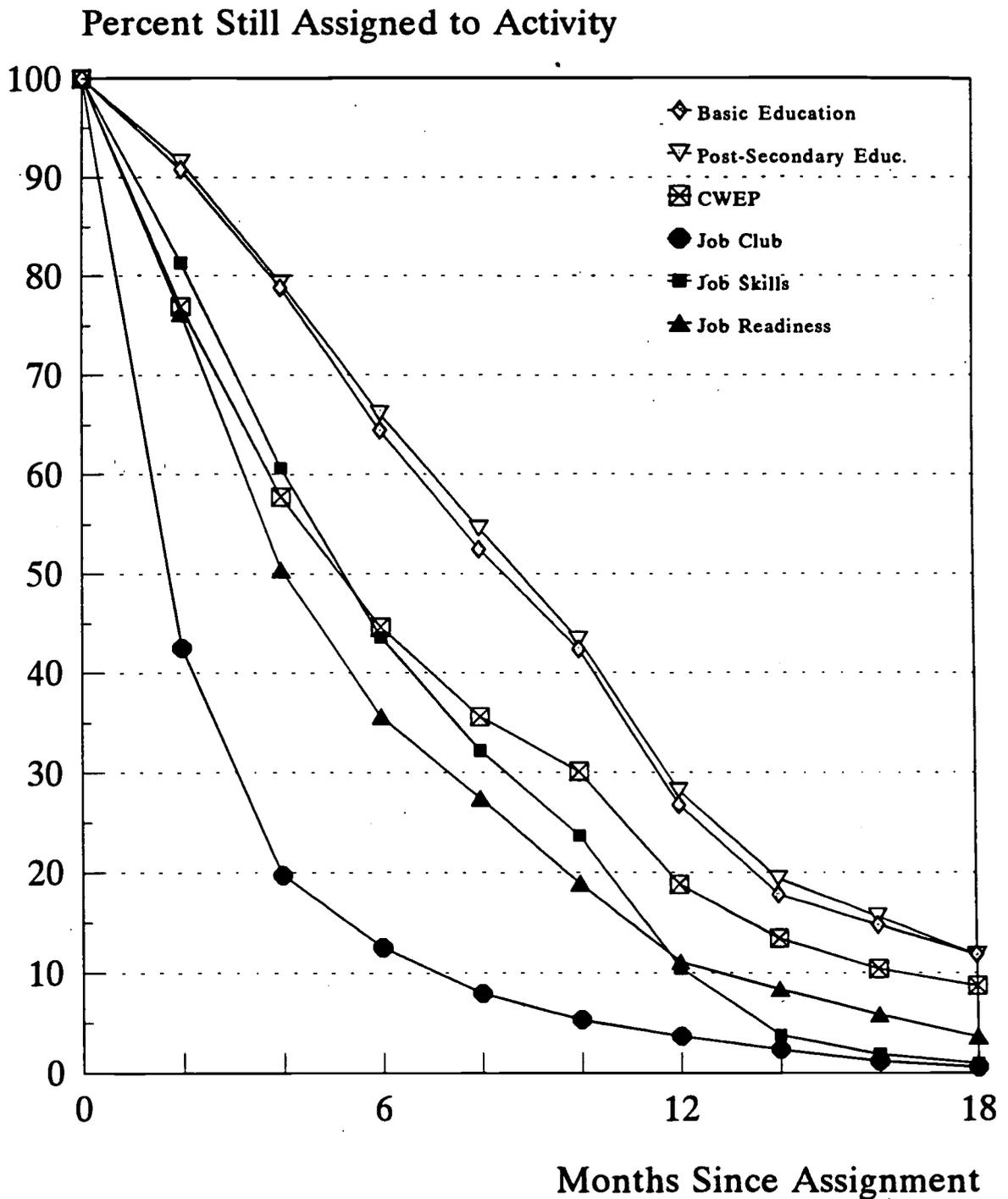
Assignments can end for many reasons. For clients remaining on ADC and non-exempt, assignments end when activities are completed successfully, or when caseworkers and/or clients decide that other assignments would be more appropriate. Activities observed to be of similar durations -- such as basic and post-secondary education -- could have quite different outcomes. Lewis and Kurth (1992) report high drop-out rates for assignments to basic education, whereas we guess that the better-motivated post-secondary assignees are less likely to drop out.

Many assignments end when clients either leave ADC or obtain an exemption from JOBS participation. It is possible to measure the effects of such departures on the length of assignments by simulating how long assignments would have lasted had clients remained subject to the participation requirement. We do this by excluding, or "censoring," assignees who departed ADC or obtained an exemption at a given assignment duration from the calculation of

¹⁶ Significance tests show that the likelihood of the observed variability across components occurring by chance is less than one percent.

¹⁷ As noted previously, spell length estimates probably have an upwards bias, given that case workers did not always record activity end dates on a timely basis. Nonetheless, the estimates probably provide a valid general portrait of differences in spell lengths across activities.

Exhibit 6 Clients Still in First Activity by Months Since Assignment: 1989 and 1990 Cohorts



all survival rates at longer durations. That is, at each duration since the start of assignment, we calculate percentages still assigned only among clients not yet leaving ADC or becoming exempt.

The resulting simulated "first assignments with no departures or exemptions" are considerably longer than actual assignments. Actual median spell durations were 1.7 months for job club; 8.5 months for basic education; 8.8 months for post-secondary education; 5.2 months for job skills; 4.1 months for job readiness; and 5.2 months for CWEP. Simulated median spell lengths increased by .3 months for job club; by 2.8 months for basic education; by 1.9 months for post-secondary education; by .9 months for job skills; by 2.3 months for job readiness; and by 5.2 months for CWEP (data not shown in exhibit).

We conclude that ADC departures and JOBS exemptions exert a substantial influence on the duration of some JOBS assignments. Although it first appears that an especially high proportion of first CWEP spells ended with ADC exits and exemptions, an equally likely explanation is that case workers did not enter end dates for CWEP assignments into the automated system as consistently as for other assignments.¹⁸

Many clients experienced more than one JOBS assignment. One of JOBS's distinctive features is that it imposes an ongoing participation requirement for non-exempt clients. Hence, a significant portion of clients' JOBS experiences may occur across different assignment spells. Surprisingly little is known about the number of different assignments clients receive or about how different activities are sequenced.

The population available for an analysis of subsequent assignments included 4,138 clients with a first assignment ending (for any reason) before December of 1992, the last month of the demonstration. Of such clients, 45 percent experienced at least one other assignment sometime in the next 24 months. The row labelled "Any Activity" in Exhibit 7 shows that clients first assigned to basic education and CWEP were least likely to receive a second assignment, whereas

¹⁸ Impressionistic evidence reported in the evaluation's process study suggests that CWEP assignments were not monitored as carefully as other assignments (Lewis and Kurth 1992).

Exhibit 7

**Percent of Clients Receiving Specific First JOBS Assignments Who Ever Were Later
Assigned to Other Activities or Sanctioned:
1989 and 1990 Cohorts^a**

Ever Later Assigned to	Type of First Assignment					
	Job Club	Basic Education	Post-2nd Education	Job Skills	Job Readiness	CWEP
Job Club	9.3%	4.8%	10.8%	20.6%	13.1%	7.6%
Basic Education	5.6	23.9	4.9	8.4	5.7	10.4
Post-2nd Education	9.7	6.9	23.7	11.2	12.0	7.2
Job Skills	2.8	1.5	3.1	6.5	3.7	1.4
Job Readiness	10.4	4.8	6.4	14.9	16.2	2.5
CWEP	25.4	12.0	11.4	13.1	9.4	25.2
Any Activity	48.1	41.5	48.3	56.1	44.4	41.7
Sanction	9.7	9.5	8.0	4.7	5.2	11.7
Number of Clients	680	1,071	613	107	383	1,284

^a Chi-square tests indicate that type of first assignment is associated in all cases with each later assignment and sanctioning at the 99-percent confidence level. Differences in percent later assigned between any two specific types of first assignment may not be statistically significant, however.

those first assigned to job club, post-secondary education and job skills were most likely to receive a second assignment.¹⁹

The likelihood that a first assignment will be followed by other assignments does not seem to be strongly related to the length of the first assignment. Nor do multiple assignments appear more likely for the most disadvantaged clients (e.g., those assigned to basic education and CWEP), who can be expected to remain on ADC (and subject to reassignment) the longest time. One possibility is that through some combination of poor monitoring by program staff and lower motivation to report for assessments, clients first assigned to basic education and CWEP were more likely to "fall through the cracks" than other clients and not receive further assignment. Another possibility is that such clients were more likely to obtain an exemption from JOBS participation through childbearing or other means.

Some E&T activities were more likely than others to have repeat assignments. Statistics in the diagonal of Exhibit 7 reveal that clients whose first assignment was to basic education, post-secondary education, or CWEP were the most likely to receive a subsequent assignment in the same category. Close to one quarter of such clients ever received repeat assignments, compared with 9, 7, and 16 percent, respectively, of clients first assigned to job club, job skills, and job readiness.

Such patterns reinforce the conclusion that basic and post-secondary education are relatively intensive activities, and suggest that many clients and their caseworkers were highly committed to completing educational assignments. Multiple spells of CWEP do not allow the same interpretation, since work experience is not structured to end with any particular event. The relatively high prevalence of repeat CWEP assignments more likely reflects use of CWEP as an assignment of "last resort" and/or the Federal rules' emphasis on its ongoing use for ADC-U clients.

¹⁹ The denominator for percentages calculated in this exhibit is all clients with first assignments, rather than just those with observed first assignment endings. The number of the former is quite close to the number of the latter, however, since most first assignments among clients who first became subject to the JOBS requirement in 1989 and 1990 had ended by the end of 1992.

The off-diagonal percentages in Exhibit 7 show the prevalence of later assignments that differed from the type of the first assignment.²⁰ Statistics in the first column suggest that clients who did not find jobs were often reassigned to CWEP. Of all clients whose first assignment was to job club, 25 percent were subsequently assigned to CWEP.

It is questionable whether CWEP is the most appropriate assignment for such a large number of (presumably) unsuccessful job club assignees. Clients first assigned to job club typically are those assessed to be most employable by virtue of work experience and education; it is not clear that further work experience would be beneficial. CWEP's use here, and elsewhere, may be as an assignment of "last resort" rather than as an affirmative measure to provide needed work experience.

Statistics for clients first assigned to basic education (second column of Exhibit 7) hint at relatively low rates of completion of this component. Relatively few clients progressed from basic education to a post-secondary education program, or to any other activity associated with successful completion of basic education.²¹ This finding is consistent with Lewis and Kurth's (1992) qualitative evidence suggesting high basic education drop-out rates.

By comparison, clients first assigned to post-secondary activities were twice as likely later to be assigned to job club. Self-selection of more motivated clients into secondary education generally gives reason to expect a higher proportion of successful completions for these assignments. First assignments to job skills training and job readiness activities were the most likely to be followed by a later assignment to job club, but subsequent assignments to post-secondary programs were also relatively likely for this group.

Clients' cumulative JOBS experiences reached fairly substantial levels. The foregoing analysis suggests that many clients experienced more than one JOBS assignment, with multiple assignments common both within and across categories. Here, we summarize clients'

²⁰ As noted earlier, about four percent of first assignments were "ties," that is, first activities beginning on the same day. For purposes of this analysis, the activity which was not randomly chosen as the "first" assignment was considered to be a "subsequent" activity.

²¹ Some clients completing basic education may have found jobs and may not have needed further JOBS assignments. Comparison with progression rates to subsequent activities for clients first assigned to other activities, such as post-secondary education, suggests that direct exits to jobs from basic education were relatively uncommon. More direct evidence on basic education and employment will be offered in the next major section of this report.

cumulative experience in JOBS across spells. We present these statistics chiefly to document the total extent of participation in each activity which underlies the impacts presented in Chapter 3.

Exhibit 8 shows the percentages of all clients who ever had received each type of assignment at the end of their first, second, and (for 1989 cohort members) third years after demonstration entry.²² Rates of ever assignment to individual components do not add to rates shown in the row labelled "Any Activity," because many clients had multiple assignments.

The cumulative assignment rates in the exhibit are reminiscent of the first assignment patterns reviewed in Exhibit 4. They show, for example, that rates of ever assignment to basic and post-secondary education by the end of clients' second year of exposure (second column of Exhibit 8) were similar or higher for the 1990 cohort (bottom panel) compared with the 1989 cohort (top panel), whereas rates of ever assignment to CWEP declined.

Exhibit 9 presents the cumulative average number of months spent in each activity, among the increasing populations of clients who had ever been assigned to the activity by the end of each year. The statistics in the exhibit suggest considerable variability across activities. For example, the exhibit's last column shows that, after three years, the average member of the 1989 cohort ever assigned to job club had spent only three months in this activity, compared with ten months in basic education for those ever assigned to that activity.

Members of the 1990 cohort who were ever assigned to each component generally show longer average assignment durations than members of the 1989 cohort at comparable intervals of exposure. The difference appears to arise mainly in differing average time spent in assignments during the first year. For example, the average 1990 cohort member assigned to basic education by the end of her first year had participated in this activity for 4.3 months, compared with only 1.8 months for her 1989 cohort counterpart. This finding is yet another reflection of the relatively slow pace of initial JOBS enrollment during program start-up (see Exhibit 3).

²² As elsewhere in this report, demonstration entry represents the point that ADC clients in the treatment group first became subject to the JOBS requirement, regardless of whether and when they first were notified, assessed, and assigned.

Exhibit 8

**Cumulative Percent of Clients Ever Assigned to Specific JOBS Activities
and Ever Sanctioned at the End of Successive Years Since First Mandatory**

Cohort/Activity	Percent ^a Ever Assigned by the End of		
	Year 1	Year 2	Year 3
1989 Cohort			
Job Club	4.3%	7.0%	8.2%
Basic Education	4.5	9.0	10.9
Post-2nd Education	2.8	6.1	8.2
Job Readiness	1.2	3.2	4.5
CWEP	7.7	13.4	16.4
Any Activity	19.5	33.2	38.0
Sanction	1.2	2.5	4.1
1990 Cohort			
Job Club	4.1%	5.9%	—
Basic Education	6.5	8.8	—
Post—2nd Education	5.1	7.8	—
Job Readiness	3.0	4.1	—
CWEP	5.6	8.7	—
Any Activity	21.6	28.0	—
Sanction	1.9	3.7	—

^a Based on a total of 7,773 clients in the 1989 cohort and 4,783 in the 1990 cohort.

— Not observed.

Exhibit 9

**Mean Cumulative Months of Assignment to Specific JOBS Activities and Sanctions
at the End of Successive Years Since First Mandatory:
Clients Ever Assigned to Each Activity/Sanction**

Activity	Cumulative Mean Months for Clients Assigned by the End of		
	Year 1	Year 2	Year 3
1989 Cohort			
Job Club	1.4	2.7	3.2
Basic Education	1.8	6.2	10.3
Post-2nd Education	1.3	5.2	9.2
Job Readiness	1.0	3.8	5.9
CWEP	1.9	5.2	8.3
Any Activity	2.2	6.4	10.1
Sanction	.4	1.6	3.3
1990 Cohort			
Job Club	1.6	2.4	—
Basic Education	4.3	7.7	—
Post—2nd Education	3.6	8.1	—
Job Readiness	2.9	4.8	—
CWEP	2.4	5.1	—
Any Activity	3.9	7.5	—
Sanction	1.2	3.6	—

CHAPTER THREE

FINDINGS ON THE IMPACTS OF JOBS ASSIGNMENTS

In the last chapter, we found that many clients assigned to the treatment group in the Ohio JOBS demonstration never participated in employment and training activities, and that many of those who were assigned did not receive their first assignments until the second or third year of program exposure. We also saw that those who were assigned to activities received different types and sequences of assignments. In this chapter, we assess how different employment and training assignments affected ADC clients' employment and earnings.

The evaluation's formal impact analyses revealed that Ohio's early JOBS program had only modest impacts on self-sufficiency for the population of clients that was subject to participation in theory. Fein *et al.* (1994) report that after three years of follow-up, employment rates in the randomly-assigned treatment group were only three percentage points higher than those for the control group. The impact evaluation showed no statistically significant effects on average total earnings, ADC participation, or average total ADC payments.

The experimental design gives us confidence that these estimates are accurate, but does not provide any basis for ascertaining why impacts were so small. With reference to employment and training participation -- the chief route by which JOBS was intended to increase self-sufficiency -- one hypothesis is that impacts were diluted because the treatment group included a majority of clients who never were assigned during the follow-up period. Another is that assignments came too late for those who received them to allow sufficient time for positive impacts to emerge.

Among ever-assigned clients, some employment and training activities may have been more effective than others. The experimental design makes it difficult to detect positive impacts for activities which constituted a relatively small fraction of all assignments, because impacts will look mostly like the effects experienced by the majority. Furthermore, if impacts were positive for some activities and negative for others, the two might cancel out. The policy

implications are quite different, depending on whether activity impacts run in opposing directions or are always small.¹

Because random assignment occurred when clients first were determined to be JOBS-mandatory, rather than at the point they were assigned to specific activities, we do not have a ready-made control group for measuring impacts of different employment and training activities. Accordingly, it is necessary to estimate how clients receiving different assignments would have fared without JOBS by other statistical means.

Section 3.1 describes the approach that was used. Section 3.2 and 3.3 then present findings on the impacts of different JOBS employment and training activities, including job club, basic education, post-secondary education, job readiness training, and CWEP. Section 3.2 assesses impacts for all clients who were ever assigned to each activity of interest. Section 3.3 provides impacts for clients whose first assignments occurred before the fourth follow-up quarter to provide a better approximation to the longer-term effects of JOBS assignments.

3.1 HOW IMPACTS WERE ESTIMATED

Although the technique used to estimate impacts for specific activities was nonexperimental, it did incorporate information from the evaluation's randomly-assigned control group. For each outcome, regressions were estimated for the control group, and the results were used to predict the employment and earnings each treatment-group member would have had without JOBS. An impact was estimated for each treatment-group member by subtracting this predicted value from the actual employment and earnings values that were observed for the same person.² The average of such differences across treatment group members receiving a given

¹ Whereas the former would stimulate analysis of why some assignments did and others did not prove effective -- with an eye towards fine-tuning activities and possibly changing the types of clients receiving them -- the latter might lead to suggestions that overarching programmatic features need to be reconsidered.

² Two steps were involved in predicting employment and earnings. First, we estimated equations relating these outcomes to characteristics of clients in the evaluation's randomly-assigned control group using ordinary least squares regression. Next, we created a series of products for each treatment-group member by multiplying her actual value for each characteristic times the corresponding coefficient from the control group regressions equations. Each treatment group member's predicted employment and earnings (absent JOBS) were calculated by summing products over all variables used in the regression model. The predictions thus are based on the following model:

employment and training assignment were calculated at fixed intervals of follow-up after the calendar quarter of demonstration entry; that is, the quarter in which clients first appeared as JOBS-mandatory in the State's automated tracking system.

Outcomes for which impacts were measured were employment (presence or absence of earnings) and total earnings for the fourth, eighth, and twelfth quarters following the quarter of demonstration entry (quarter 0). The source of earnings data was quarterly earnings reported by employers to Ohio's UI benefits system. We concentrate on impacts for clients in the 1989 cohort, all of whom were observable for three full years.³

In Section 3.2, impacts estimated for a given JOBS component in a particular quarter apply to all clients who had ever been assigned to that component prior to the quarter in question. The population on which component-specific effect estimates are based thus increases from quarter to quarter, as new clients in the original cohort who were not previously assigned are assigned to that component. The resulting impact estimates for a specific JOBS activity in a given quarter reflect the effects of having been assigned to the component in question, plus the effects of any other earlier, concurrent, or later assignments received prior to the quarter of observation.

Impacts presented in Section 3.3 apply only to clients who had been first assigned to a given component sometime prior to their fourth quarter of follow-up.⁴ Isolating impacts for clients who received their first assignments relatively soon in the follow-up period provides a better approximation to the long-term effects of each assignment. Again, the impacts reflect the additional contributions that any subsequent assignments may have had.

Two additional points bearing on the interpretation of impacts in both Sections 3.2 and 3.3 should be noted. First, the time dimension in this analysis refers to time elapsed since

$$PY_i^t = a^c + X_i^t B^c,$$

where PY_i^t is the value of the predicted outcome for the individual i in the treatment group, X_i^t is a vector of i 's observed characteristics, B^c is a vector of corresponding coefficients estimated for the control group and a^c is the intercept. Further details are provided in the Appendix.

³ Impact estimates for the 1990 cohort are presented in the Appendix, where they are used to assess the extent of selection biases resulting from the estimation methodology.

⁴ Because this group is identical to the population on which fourth-quarter impacts in Section 3.2 are based, fourth-quarter (but not later) impacts are the same in the two sets of estimates.

demonstration entry, not time spent in component assignments.⁵ Second, the impacts capture the effects of ever-assignment to each component without regard to how and when assignments ended. They therefore average effects for clients who had and had not successfully completed their assignments prior to each quarter observed.

3.2 IMPACTS OF EVER-ASSIGNMENT TO JOBS ACTIVITIES FOR ALL EVER-ASSIGNED CLIENTS

In this section, we present our findings on the impacts of ever-assignment to specific JOBS activities, including: job club, basic education, post-secondary education, job readiness, and CWEP.⁶ In each follow-up quarter, clients for whom impacts are presented include all treatment group members who had received a given assignment sometime prior to that quarter. We also present overall impacts for all ever-assigned clients and impacts for treatment group members who were never assigned during the three years of follow-up.

Job club assignments were associated with the earliest emergence of positive impacts. The nature of job club -- Ohio's job search component -- causes us to expect that impacts will emerge relatively quickly. Job club assignments are short -- typically two or three weeks of classroom training and exercises followed by three to six weeks of guided job search -- and, unlike other JOBS activities, are oriented directly towards employment. Many prior evaluations have found job search assistance to have consistent modest positive effects on AFDC clients' employment and earnings (Gueron and Pauly 1991). For example, a strong emphasis on job search -- in combination with aggressive job development and placement -- is one explanation which has been offered to explain JOBS' 50-percent increase in total earnings in Riverside, California (Riccio, *et al.* 1994).

⁵ The average assignment durations underlying the impacts presented in this chapter are given in Exhibit 9. Interpreting the effects of varying times in assignments in models including such variables would raise a number of complicated analytical issues. For example, to properly interpret the effects of duration, one would need to consider whether assignments were successfully completed and how long the assignment *should have taken* to complete, given that requirements vary for different assignments and clients enter assignments with varying levels of preparation.

⁶ Given small sample sizes, impacts for assignees to job skills are not presented here.

Exhibit 10 shows that in Ohio, job club had positive effects on employment and earnings in the fourth, eighth, and twelfth quarters after clients first became JOBS-mandatory. The exhibit's second and third columns show the employment impacts. By the fourth quarter of their first year, employment rates for clients previously receiving a job club assignment were 9 percentage points (column 2) higher than they would have been without any JOBS exposure: a 32-percent proportionate impact (column 3). In the eighth and twelfth quarters, proportionate impacts were 25 and 28 percent, respectively. Impacts on average total earnings for job club assignees appear in columns 5 and 6. The proportionate fourth-quarter impact on total earnings (18 percent) was somewhat smaller than the corresponding employment impact, but proportionate earnings and employment impacts were generally similar in the eighth and twelfth quarters.

Similar proportionate impacts for employment and earnings suggest that gains in total earnings among job club assignees stem from increased job placements, rather than from higher earnings for those placed. Echoing findings from previous demonstrations, the results are consistent with the view that job search is geared more towards helping clients to find work than towards increasing the value of their labor.

Contrary to expectations, clients assigned to basic education showed lower employment and earnings during the first two years of follow-up than would have been the case absent JOBS. Though smaller, impacts were still negative at the end of the third year. Intensive investments in basic education lie at the heart of the national JOBS strategy. This emphasis has a sound underlying premise -- that educational credentials and high skill levels are required to obtain and succeed in jobs which provide decent wages and benefits. However, many welfare clients have long histories of school failure, and it is unknown whether enrolling them in basic education programs will lead to the desired outcomes. Furthermore, there are many ways to design and implement basic education, and it is unclear which, if any, will be effective.

The estimates in the next third through sixth rows of Exhibit 10 reveal that the average client assigned to basic education in Ohio's JOBS program achieved lower levels of employment and total earnings in all three quarters than they would have had absent JOBS participation. Had they not been exposed to JOBS, for example, the percentage of basic education assignees

Exhibit 10

**Impacts on Employment and Total Earnings of Ever-Assignment to Different JOBS
Activities Prior to Selected Quarters Since First JOBS-Mandatory: 1989 Cohort**

Type of Activity	Employment			Total Earnings			Number of Assignees
	Predicted Mean (1)	Impact ^a (2)	Relative Impact ^b (3)	Predicted Mean (4)	Impact ^a (5)	Relative Impact ^b (6)	
Job Club							
4th Quarter	29.2%	9.3% ***	31.8%	\$ 608	\$ 108	17.8%	312
8th Quarter	30.8	7.8 ***	25.3	705	208 **	29.5	534
12th Quarter	32.5	9.2 ***	28.3	811	180 **	22.2	629
Basic Education							
4th Quarter	24.4%	-7.9% ***	-32.4%	\$ 422	\$ -155 **	-36.7%	309
8th Quarter	24.7	-7.2 ***	-29.1	482	-209 ***	-43.4	672
12th Quarter	28.6	-4.8 **	-16.7	624	-214 ****	-34.3	843
Post-Secondary Ed.							
4th Quarter	26.6%	-6.4% *	-24.1%	\$ 448	\$ -75	-16.7%	159
8th Quarter	25.7	1.5	5.8	512	8	1.6	405
12th Quarter	29.0	3.0	10.3	640	87	13.6	544
Job Readiness							
4th Quarter	35.8%	5.5%	15.4%	\$ 817	\$ -4	-.5%	80
8th Quarter	33.2	2.0	8.6	798	-29	-3.6	247
12th Quarter	34.4	4.8 *	14.0	815	160	19.6	339
CWEP							
4th Quarter	19.8%	.3%	1.5%	\$ 329	\$ 30	9.1%	554
8th Quarter	23.2	-1.6	-6.9	445	-37	-8.3	1,029
12th Quarter	25.4	-2.3	-9.1	566	-80	-14.1	1,257

* Statistically significant at the 10% level; ** at the 5% level; *** at the 1% level.

^a The impact is the difference between the *actual* treatment-group mean (not shown) and the *predicted* mean without JOBS (Columns 1 and 4).

^b The relative impact is the impact expressed as a proportion of the predicted mean.

employed in quarter twelve would have been five percentage points higher than was actually achieved, and earnings would have been \$164 higher.

A likely explanation for reduced employment and earnings is that educational assignments caused clients to postpone working, or reduce work hours in order to participate in JOBS. Such "opportunity costs" may or may not be undesirable, depending on whether they come to be outweighed by positive impacts in the long-term. The fact that negative employment impacts grow smaller over time in Exhibit 10 does suggest that opportunity costs may have diminished with the ending of clients' basic education assignments. However, negative earnings impacts remain rather large, suggesting that at best the economic benefits of basic education will surpass the costs only after a long time period.

Comparison of columns three and six reveals that negative impacts on earnings were much larger than the corresponding negative impacts on employment for basic education assignees, especially at the end of the second and third years of follow-up. One possible explanation is that it is easier to find some work after a stretch of basic education participation than to make up for deferred raises and promotions. Another is that basic education assignees who return to employment may work fewer hours and/or remain employed for shorter periods than they would have otherwise. This weakened labor force attachment could be the result either of deliberate efforts to combine part-time work with school, or of difficulties in adjusting to work following surrounding school-to-work transitions.

Many clients entered basic education with large educational and/or basic skills deficits, suggesting that even if they were motivated, considerable time would be required for them to earn a GED. The evaluation's three-year follow-up period thus may have been insufficient to measure the extent to which GED attainment is associated with improved employment and earnings. We did try to isolate effects for clients JOBS helped to obtain a GED during the follow-up period. Such clients may provide an outer bound to the impacts of GED completion, given that they represent the most advantaged among basic education assignees.

Although we did not have direct information on GED attainment, we were able to infer attainment when basic education assignees subsequently received assignments that typically required a GED, such as job club, post-secondary education, skills training, and job readiness

training.⁷ Among the 843 clients assigned to basic education, 135 (16 percent) subsequently received such assignments. Impacts estimated for this group showed somewhat more favorable results than basic education assignees as a whole, but still were not very large.⁸

Given how far many basic education assignees were from GED completion, the findings imply that the benefits of basic education on employment and earnings -- if any -- will occur only in the very long term. Similarly sobering results were obtained in an evaluation of California's GAIN program, which found no statistically significant impacts on earnings or welfare payments for clients in need of basic education (Riccio *et al.* 1994). Only clients who were already close to meeting GED requirements showed improved self-sufficiency in GAIN. Such findings do not necessarily call the basic wisdom of educational investments into question, but they do serve to warn policy makers not to expect results quickly.

Small positive impacts on employment and earnings emerged for clients assigned to post-secondary programs during the third year after demonstration entry. The effects were not statistically significant, however. States have the option of allowing clients to participate in post-secondary education programs as a JOBS activity. We saw earlier that this option is being exercised quite vigorously in Ohio. The increasingly strong association between college-level education and earnings in the general population -- a reflection of the economy's movement towards high-skill jobs -- has led one commentator to characterize post-secondary education as "the most promising route out of poverty" (Greenberg 1993). A different route to improved job skills -- vocational training -- also has many advocates (e.g., Burghardt *et al.* 1992).

The third panel of Exhibit 10 summarizes our impact estimates for assignees to post-secondary education. Like basic education, impacts are negative one year after demonstration entry, reflecting the short-term opportunity costs of schooling. In quarter 4, we see negative

⁷ This number probably understates the number of basic education completers, since some clients undoubtedly leave ADC upon receiving their GED or do not receive a subsequent assignment for other reasons.

⁸ By quarter twelve, the impact on employment for completers (not shown in tabular form) was a positive three percentage points, compared with the negative five percentage-point impact among all basic education assignees. Impacts on total earnings still were negative among completers, though at -\$134, somewhat smaller than the -\$214 impact for all assignees. Due to the small sample of completers, neither employment nor earnings impacts was statistically significant at the 90-percent confidence level.

proportionate impacts of 24 and 17 percent for employment and total earnings, respectively.⁹ Unlike impacts for basic education assignees, however, those for clients assigned to post-secondary activities do turn positive by the end of the follow-up period. In quarter 12, we see proportionate impacts of 10 and 14 percent for employment and total earnings, respectively. Although positive, these impacts are not statistically significant.

A relatively high proportion of post-secondary assignments in Ohio arise through client initiative, and the earliest enrollment often precedes contact with the JOBS program (Lewis and Kurth 1992). Clients assigned to these activities are likely to be highly motivated and may have made substantial progress by the time their studies get recognized as JOBS activities. Greater motivation and pre-JOBS enrollment may account for the earlier emergence of impacts for such activities compared with basic education assignees. Furthermore, completion of post-secondary coursework or degrees probably adds more to clients' marketability than completion of basic skills training coursework or a GED.

What did JOBS add that might have increased success in post-secondary education activities? Lewis and Kurth report that the State's Student Retention Program for JOBS clients in post-secondary programs appeared to be a highly successful undertaking in a number of counties. JOBS supportive services -- such as child care and transportation assistance -- also may have contributed to improved outcomes. Even though many post-secondary assignees were highly motivated, the JOBS participation requirement still may have bolstered their incentives to continue in these activities. Finally, for clients first assigned to post-secondary activities by JOBS, the program provides direct financial support for tuition and related expenses.

As discussed in the Appendix, the models used to predict employment and earnings did include variables expected to capture post-secondary education assignees' greater motivation (e.g., time on welfare), but likely did not capture all of the differential in motivation. Hence, the estimated post-secondary impacts could be subject to selection biases, which would have the effect of making such impacts look larger than they actually were.

⁹ The negative impact for employment is statistically significant at the 10-percent level, whereas that for total earnings is not statistically significant.

Job readiness training also appears to enhance employment prospects over the long-run. Job readiness activities are aimed towards teaching clients about workplace behaviors and attitudes needed to compete successfully in the labor market. The effects of such training can be hypothesized to differ from these educationally- and skill-oriented components. Whereas the latter can be expected to raise both employment and wages in the long term, job readiness activities might have more impact on clients' prospects for getting and keeping jobs in the short term.

Impact estimates for clients assigned to job readiness activities appear in the fourth panel of Exhibit 10. Neither employment nor earnings impacts are statistically significant in quarters 4 or 8. Statistically significant positive impacts for employment do emerge in quarter twelve, however. Three years after first becoming JOBS mandatory, clients assigned to job readiness were 14 percent more likely to be working than they would have been absent JOBS. Although not statistically significant, job readiness assignees' earnings were 20 percent higher than predicted.

Impacts for clients assigned to CWEP were not statistically significant during the observation period. Work experience is a more important JOBS component in Ohio than in many other states. Ohio JOBS clients are assigned to CWEP for various reasons. They may have been assessed to need work experience, or they may have been assigned to CWEP to comply with JOBS rules (e.g., 20 hours per week: work activities for two-parent families) or because no other assignment seemed appropriate. Frequent use of CWEP as an assignment of "last resort" makes Ohio's experience especially relevant to proposals to make workfare a last resort in a transitional welfare program.

The last panel of Exhibit 10 shows no statistically significant impacts for clients assigned to CWEP. The magnitudes of both employment and earnings impacts are small and inconsistent in sign.

These findings suggest that CWEP did little to improve clients' employment or earnings. The evaluation's process study found that CWEP frequently was used for clients who wished to avoid other assignments (e.g., basic education) or had already been enrolled in other assignments without success (e.g., job club), and that monitoring and supervision of CWEP assignments were generally weak over the period covered by the demonstration.

Impacts averaged over all clients ever assigned to any JOBS activity were small and statistically insignificant. The net findings shown in the first panel of Exhibit 11 affirm the importance of attempting to measure the effectiveness of different components of complex programs such as JOBS. Positive impacts for job club, post-secondary education, and job readiness assignees were offset nearly exactly by negative impacts for basic education and CWEP assignees. The results dramatize how the impacts of a program can be substantially more complex than suggested by overall impact findings.

In principle, mandatory programs like JOBS can have effects on clients never assigned to employment and training activities. However, no such effects were found in Ohio's JOBS program. In contrast to voluntary employment and training programs, programs like as JOBS can affect clients who never receive key services. Such impacts can arise in a number of ways.

One is through actions taken to avoid program participation. Clients may take jobs or get married rather than participate in JOBS activities; or they may claim an exemption from participation. Depending on the nature of their response, the implications for employment and earnings could be either positive or negative. Impacts also could occur through exposure to aspects of JOBS such as assessment, remedial services (e.g., substance abuse counselling), and sanctions for non-cooperation.¹⁰ Such exposure might be expected to have generally positive effects on employment and earnings, in proportion to the extent to which clients actually received them.

Findings in the second panel of Exhibit 11 show no statistically significant impacts for clients who never received JOBS employment and training assignments. In general, it seems likely that impacts for non-assignees were low both because enforcement was not a major emphasis of Ohio's early JOBS program, and because services provided outside the employment and training program were relatively scarce.

¹⁰ Another potential source of impacts on non-assignees is the offer of transitional Medicaid and child care payments. Such effects are excluded in the impacts measured in our study, however, since members of both the treatment and control groups were allowed to receive transition benefits.

Exhibit 11

**Impacts on Employment and Total Earnings for Clients Ever Assigned to JOBS
Activities Prior to Selected Quarters Since First JOBS-Mandatory and
for Those Never Assigned: 1989 Cohort**

Whether Assigned	Employment			Total Earnings			Number of Clients (7)
	Predicted Mean (1)	Impact ^a (2)	Relative Impact ^b (3)	Predicted Mean (4)	Impact ^a (5)	Relative Impact ^b (6)	
Ever Assigned							
4th Quarter	24.4%	0.9%	3.7%	\$ 451	\$ 15	3.3%	1,401
8th Quarter	26.6	-0.2	-0.8	557	-15	-2.7	2,541
12th Quarter	29.2	0.9	3.1	671	15	2.2	2,930
Never Assigned							
4th Quarter	31.7%	2.0%	6.3%	\$ 678	\$ 24	3.5%	4,843
8th Quarter	35.2	1.6	4.5	905	-4	0.4	4,843
12th Quarter	33.6	1.7	5.1	937	-24	-2.6	4,843

^a The impact is the difference between the *actual* treatment-group mean (not shown) and the *predicted* mean without JOBS (Columns 1 and 4). None of the impacts in this exhibit are statistically significant at the 10-percent confidence level.

^b The relative impact is the impact expressed as a proportion of the predicted mean.

3.3 IMPACTS OF EVER-ASSIGNMENT TO JOBS ACTIVITIES FOR EARLY ASSIGNEES

Although the foregoing analysis strongly suggests that there were important differences in impacts across E&T activities, it does not address a key concern with regard to the basic validity of the JOBS approach: what were the longer-term impacts for clients who received assignments? As seen in Chapter 2, slow program start-up meant that many clients did not enter JOBS assignments until months after they first became JOBS-mandatory. Because they were based on all clients ever-assigned to each type of activity, the impacts just discussed mix effects for clients just entering assignments prior to each follow-up period with effects for clients who already had been in their assignment for some time.

In this section, we discuss an alternative set of estimates which better approximates longer-term assignment effects. These impacts are similar to the ones in Section 3.2, except that they are estimated only for "early assignees" -- that is, treatment group members who had received an assignment prior to the fourth follow-up quarter. As in the previous analysis, we estimate impacts on employment and earnings for the fourth, eighth, and twelfth quarters after demonstration entry.

In forming conclusions based on these statistics, it is important to note that, as before, the results represent the effects of early *assignment*, rather than of any particular duration or quality of activity participation. The estimates still pertain to a mix of clients -- this one consisting of clients successfully completing their assignments and those rarely attending them.

Exhibit 12 shows detailed impacts of JOBS for early assignees. The format of the exhibit is similar to that of Exhibit 10, except that results for all early assignees are included as a final panel in Exhibit 12, rather than in a separate exhibit (as in Exhibit 11). Because only early assignees are included in Exhibit 12, only one sample size is given for each type of assignment.¹¹

To facilitate interpretation, twelfth-quarter impacts for early assignees (from Exhibit 12) are depicted graphically in Exhibit 13, alongside the corresponding impacts for all assignees (from Exhibit 10). For each activity, the first bar shows the impact for all ever-assigned clients,

¹¹ This number is the same as the number who had been assigned by the fourth quarter in Exhibit 10. Because impacts at each follow-up quarter in Exhibit 10 are based on all clients previously assigned to activities prior to that quarter, the corresponding fourth-quarter impact estimates in the two exhibits also are the same.

Exhibit 12

Impacts on Employment and Earnings for Early Assignees in the 1989 Cohort^a

Type of Activity	Employment			Total Earnings			Number of Assignees (7)
	Predicted Mean (1)	Impact ^b (2)	Relative Impact ^c (3)	Predicted Mean (4)	Impact ^b (5)	Relative Impact ^c (6)	
Job Club							
4th Quarter	29.2%	9.3% ***	31.8%	\$ 608	\$ 108	17.8%	312
8th Quarter	33.6	6.8 **	20.2	824	162	19.7	
12th Quarter	34.0	8.6 ***	25.3	928	224 **	24.1	
Basic Education							
4th Quarter	24.4%	-7.9% ****	-32.4%	\$ 422	\$ -155 **	-36.7%	309
8th Quarter	27.9	-4.9 *	-17.6	585	-154	-26.3	
12th Quarter	31.1	-1.3	-4.2	733	-163 *	-22.2	
Post-Secondary Ed.							
4th Quarter	26.6%	-6.4%	-24.1%	\$ 448	\$ -75	-16.7%	159
8th Quarter	28.0	7.9 **	28.2	572	175	30.6	
12th Quarter	31.1	12.2 ***	39.2	721	326 **	45.2	
Job Readiness							
4th Quarter	35.8%	5.5%	15.4%	\$ 817	\$ -4	-.5%	80
8th Quarter	37.5	3.8	10.1	1,002	90	9.0	
12th Quarter	39.4	11.9 **	30.2	1,105	301	27.2	
CWEP							
4th Quarter	19.8%	.3%	1.5%	\$ 329	\$ 30	9.1%	554
8th Quarter	24.0	-1.7	-7.1	483	-2	-.4	
12th Quarter	24.8	-.6	-2.4	581	-3	-.5	
Any Activity							
4th Quarter	24.4%	.9%	3.7%	\$ 451	\$ 15	3.3%	1,401
8th Quarter	28.2	1.7	6.0	618	52	8.4	
12th Quarter	29.7	3.7 **	12.5	736	97	13.2	

* Statistically significant at the 10% level; ** at the 5% level; *** at the 1% level.

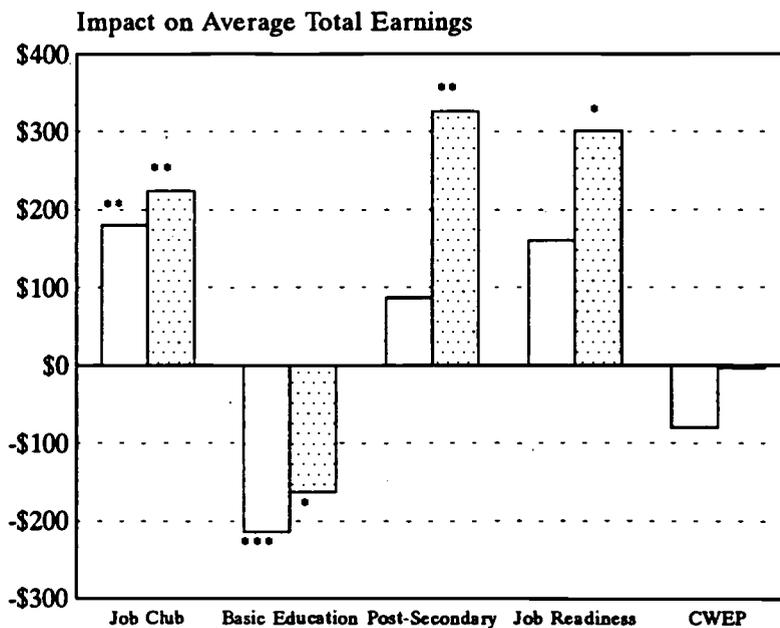
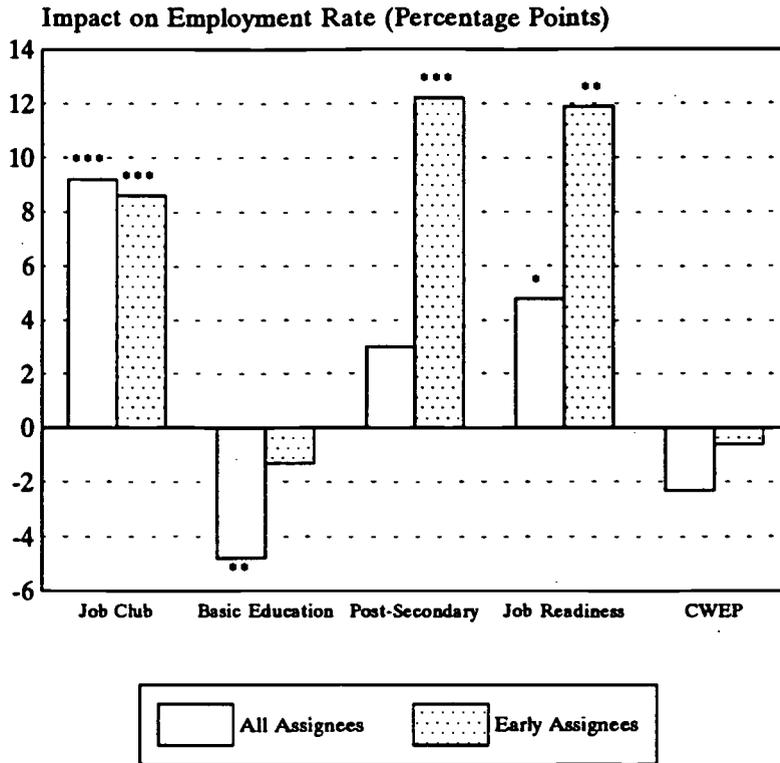
^a Early assignee are clients receiving assignments before the fourth follow-up quarter.

^b The impact is the difference between the *actual* treatment-group mean (not shown) and the *predicted* mean without JOBS (Columns 1 and 4).

^c The relative impact is the impact expressed as a proportion of the predicted mean.

Exhibit 13

Comparison of 12th-Quarter Impacts for All Ever-Assigned Clients and Early Assignees



and the second shows the impact for early assignees. The exhibit's top and bottom panels display percentage-point impacts on employment rates and dollar impacts on average total earnings, respectively.

The top panel shows that twelfth-quarter employment impacts for early assignees were quite different from those for all assignees for three activities: basic education, post-secondary education, and job readiness. The impact for early basic education assignees -- minus one percentage point -- is much smaller than the negative five-point impact for all assignees, and it is no longer statistically significant. Positive impacts for early assignees to post-secondary education and job readiness -- both close to 12 percentage points -- are much larger than the corresponding estimates for all assignees. For the two remaining activities -- job club and CWEP -- impacts for early assignees resemble those for all assignees quite closely.

Earnings impacts for post-secondary education and job readiness training (bottom panel of Exhibit 13) also are positive and substantial for early assignees. The quarterly earnings impacts for both activities amount to annual boosts in earnings of about \$1,200. Results for basic education remain negative and statistically significant. Impacts for job club and CWEP also show little evidence of impacts among early assignees.

The findings accord with expectations that investments in education and skills require more time to bear fruit than expenditures for job search. The finding seems sensible in light of the fact that many clients' pre-JOBS educational preparation left them years away from skills needed to pass the GED, whereas job club is an activity of relatively short duration.

The last panel in Exhibit 12 shows impacts averaged across all early assignees. Overall impacts -- though positive -- remain small after three years of follow-up.¹² Favorable employment and earnings effects associated with job club, post-secondary education, and job-readiness training apparently were largely offset by unfavorable impacts for basic education and CWEP.

¹² Employment, but not earnings, impacts are statistically significant, although the proportionate size of the two effects is very similar. Significance levels for proportionately-equivalent employment and earnings impacts often differ, because earnings are more variable than employment. The fact that the impacts are proportionately very similar, and the employment impacts are statistically significant, gives us some confidence that the impacts on earnings for early assignees did not arise by chance.

CHAPTER FOUR

CONCLUSIONS

Employment and training (E&T) assignments in Ohio reveal how one state implemented JOBS during a period of limited program resources and burgeoning ADC caseloads. In this state with strong county government, much of the responsibility for allocating JOBS resources was left to county departments of human services. As far as we know, the state never indicated that the goal of its JOBS program was anything less than full participation. Counties appear to have been left to develop their own rules for deciding which clients to process first and what services to provide them. As documented in our process reports, backlogs were chronic through most of the period covered by our analysis (1989 to 1992), especially in the larger counties.

4.1 EMPLOYMENT AND TRAINING ASSIGNMENT PATTERNS

The imbalance between resources and caseload size produced a lengthy average delay between the moment clients first became subject to JOBS requirements in theory (e.g., by law) and the time they received their first JOBS E&T assignments. This delay depressed both period and cohort assignment rates. Period rates -- assignment rates measured for all JOBS-mandatory clients during a given period -- were reduced chiefly because many mandatory clients spent much of their time during the period awaiting assessment and/or assignment. Cohort rates -- rates of ever-assignment for a given group of clients -- were reduced because many cohort members left ADC or obtained an exemption from JOBS before assessment and/or assignment could occur.

Such problems hardly were unique to Ohio between 1989 and 1992. In fiscal year 1992, only 16 percent of adults nationwide who were required to participate in JOBS actually did so. The official participation rate for Ohio -- 19 percent -- is slightly higher than this. Although such participation levels may appear low for a "mandatory" program, they are no surprise to those aware of JOBS's low initial funding levels. Congress, in fact, anticipated the consequences of funding limitations in setting modest participation standards at fairly modest levels. During

fiscal year 1992; for example, states only had to achieve an 11-percent participation rate to qualify for the full Federal financial match.

Participation standards were set much higher for two-parent ADC families. Starting in FY 1994, one parent from at least 40 percent of Unemployed Parent cases had to be participating in "work activities" such as work experience, on-the-job training, and work supplementation. As of calendar year 1992, the last year of the JOBS demonstration, our analysis suggests that Ohio had a considerable way to go to meet this standard. Although many ADC-U families had a least one JOBS participant, many ADC-U assignments were not to work activities.

JOBS participation standards give the State a reason to assign ADC-U's to CWEP. The rule makes sense if the goal is only to make sure that someone from two-parent families is engaged in some form of activity in exchange for their grant. With regard to increasing employment and earnings, however, our findings support more rigorous (e.g., random-assignment) evaluations (e.g., Brock et al. 1993) of CWEP which also have found little impact. In the case of two-parent families, we note further that eligibility rules already require that principal wage earners have recent work experience. Such families thus may have greater needs for education and training and/or job search and placement services than for work experience.

Assignment data suggest that JOBS resources generally were being directed to the most disadvantaged clients in Ohio, as intended in the JOBS legislation. It is not clear that this targeting was always deliberate, however. In particular, chronic processing lags during the program's early years may have caused many clients with less need for JOBS to leave ADC before they could receive an assignment. Conscious application of the official JOBS targeting criteria does not appear to have been widely practiced in Ohio during this period.

More deliberate selection appears to have characterized the process of matching clients to specific JOBS activities. Our findings show that clients generally were assigned to activities on the basis of their employment experience and other factors related to employability. For example, clients with the lowest levels of recent work experience and longest durations of welfare receipt tended to receive assignments to basic education and CWEP.

The distribution of E&T assignments in Ohio reflects the major emphasis of the national JOBS program. For example, intensive educational activities -- i.e. basic and post-secondary

education -- were an important category of assignments. Ohio also is notable for its unusually heavy use of CWEP.

Many clients logged extensive time in activities, often across multiple activity spells. Assignments to intensive educational activities -- including basic and post-secondary programs -- were typically the most lengthy. Analysis of assignment sequences showed that many clients experienced multiple assignments.

Two features of progressions across assignments are of particular interest. They confirm, first, that CWEP often was used as an assignment of last resort for clients whose other activities ended without employment. In particular, a high percentage of clients first assigned to job club subsequently were assigned to CWEP, presumably because they did not find jobs. Second, activity sequences for clients first assigned to basic education assignments hint that few attained a high school diploma or equivalent. Relatively few clients progressed to a subsequent assignment to job club, post-secondary education, job skills training, or job readiness.

On a more optimistic note, repeat spells of assignment to basic education activities suggest that many clients and caseworkers were committed to seeing such activities through to completion. Thus, there is cause for hope that JOBS will help many clients to complete their GEDs, although the process is likely to take a long time in many cases.

4.2 IMPACTS OF EMPLOYMENT AND TRAINING ASSIGNMENTS

Impact findings presented in this report also suggest that the wait for positive effects for assignees to basic education -- at best -- will be longer than for assignees to other employment and training activities. During all three observed years after demonstration entry, clients assigned to basic education worked and earned substantially less than they would have absent JOBS.

To see whether outcomes were more favorable among clients who managed to complete their basic education assignments, we estimated impacts for a subset of basic education assignees presumed to have received a GED -- the 16 percent who received a subsequent assignment to a job club, post-secondary education, job skills training, or job readiness activity. Small positive effects on employment - but not on earnings -- did appear for this subset of basic education

assignees, though due to the small sample size, this effect was not statistically significant. We conclude that over a two- to three-year period, basic education is likely to show positive employment and earnings impacts only for a relatively small portion of clients.

For the vast majority of basic education assignees, prospects appear to be even less favorable. The evaluation's process study found that Ohio's JOBS program placed many clients with long histories of academic failure in traditional basic education settings that were geared to better-motivated students. Overburdened JOBS caseworkers were unable to provide the intensive personal support these clients needed (Lewis and Kurth 1992). Even with improved case management, however, basic education may be -- in the words of Herr and Halpern -- a "problematic first step" towards long-term self-sufficiency for such clients. Other approaches to imparting needed basic skills may be more effective, such as using work experience to foster an appreciation of the importance of education and developing more vocationally-oriented basic education programs. Such alternatives, though not examined in our evaluation, have been endorsed by a number of other analysts (Burghardt *et al.* 1992; Herr and Halpern 1991).

Our findings for job club and educational activities other than basic education were more encouraging. Of these activities, job club was the only activity for which positive impacts emerged in the short-run. Post-secondary education and job readiness assignments produced strong positive impacts over the longer term, especially among early assignees.

There has been much discussion of alternative ways to limit ADC eligibility to a two-year period of transitional assistance. During this period, there would be a serious attempt to provide clients with all the education and training needed for employment. The findings just summarized raise serious questions about what ADC clients can accomplish in just two, or even three, years under the best circumstances. Assignees to post-secondary education and job skills training probably represent the "best circumstances," given their presumably higher motivation and starting skill levels. Although some of these clients experienced increased earnings, and that progress is important, a majority still was not working after three years in JOBS.

Our analysis uncovered no evidence that CWEP had any positive impact on assignees' employment or earnings. It is important to remember that CWEP often was used as an assignment of "last resort," and that CWEP assignments often were not well-supervised during the study period (Lewis and Kurth 1992). It would be useful to study whether better results could be

obtained by selecting clients for their suitability (i.e., need) for CWEP and supervising them more carefully in appropriately-structured settings. For clients who might no longer be deemed suitable for CWEP under a more selective approach, appropriate alternative assignments would need to be developed. Alternatively, it might be deemed acceptable that such clients continue to be assigned to CWEP positions for the sole purpose of ensuring that they fulfill some form of work in exchange for welfare benefits.

Taken together, the vast majority of clients who were assigned to E&T activities still were not working three years after first becoming subject to JOBS. Given that JOBS is likely to be accorded an important role in future welfare reforms, it is a propitious time to be taking stock of how current services might be improved.

4.3 IMPROVING PROGRAM PERFORMANCE

We have identified a number of aspects of JOBS implementation and E&T assignments in the early Ohio JOBS program that may have limited the program's overall effectiveness. Processing lags delayed the start of many clients' first assignments and doubtless slowed the arrival of impacts. Although the same delays also may have had the salutary effect of concentrating JOBS resources on clients who needed them most, there probably are better ways to identify these clients. With official reported assignment rates for 1993 showing a marked increase over the preceding years (U.S. Department of Human Services 1994), and use of JOBS targeting criteria in Ohio reportedly more widespread, this situation already may be in hand.

The program likely would benefit from a review of the criteria used in making E&T assignments. In particular, criteria for CWEP assignments should be re-examined: limiting CWEP to clients who need and desire work experience might lead to better outcomes. Developing appropriate assignments for clients unlikely to benefit from CWEP also is a matter that needs attention. As noted above, it may be deemed sufficient that such persons be doing something in exchange for benefits. On the other hand, there may be forms of training and/or work activity which are less expensive and/or more beneficial to which such persons should be assigned.

Intensive case management services might have strengthened the effectiveness of Ohio's early JOBS program, especially for clients assigned to basic education and CWEP. Qualitative evidence suggests that there was only limited follow-up of such assignees by JOBS staff, whereas the characteristics of such clients suggest they need the most support and guidance. Useful services might include periodic meetings with teachers and supervisors, provision of supportive services, and counselling and mediation to resolve specific classroom and workplace problems.

These and other improvements could substantially enhance the effectiveness of JOBS. Still, the relatively small dent in dependency found in this report among clients who received JOBS assignments suggests that a large poverty gap would remain even if JOBS were fully funded and operationally optimized. Broader changes in public assistance policy -- and greater economic opportunities for low skill workers -- may be needed to realize the program's full potential.

REFERENCES

- Brock, T., D. Butler, and D. Long. 1993. *Unpaid Work Experience for Welfare Recipients: Findings and Lessons from MDRC Research*. New York: Manpower Development Research Corporation.
- Burghardt, J., A. Rangarajan, A. Gordon, and E. Kisker. 1992. *Evaluation of the Minority Female Single Parent Demonstration: Volume I: Summary Report*. Princeton, NJ: Mathematica Policy Research, Inc.
- Committee on Ways and Means, U. S. House of Representatives. 1992. *Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means*. Washington, D. C.: U. S. Government Printing Office.
- Employment and Training Reporter. 24 (46). August 4, 1993.
- Fein, D., E. Beecroft and J. Blomquist. 1994. *The Ohio Transitions to Independence Demonstration: Final Impacts for JOBS and Work Choice*. Bethesda, MD: Abt Associates, Inc.
- Greenberg, M. 1993. *The Devil is in the Details: Key Questions in the Effort to "End Welfare as We Know It."* Washington, D. C.: Center for Law and Social Policy.
- Gueron, J. and E. Pauly. 1991. *From Welfare to Work*. New York: Russell Sage Foundation.
- Heckman, J. and J. Hotz. 1989. "Choosing Among Alternative Nonexperimental Methods for Estimation of the Impact of Social Programs: The Case of Manpower Training." *Journal of the American Statistical Association*. 84(408): 862-874.
- Herr, T. and R. Halpern. 1991. *Changing What Counts: Rethinking the Journey Out of Welfare*. Evanston, IL: Center for Urban Affairs and Policy Research.
- Hollenbeck, K., J. Huñagle, and P. Kurth. 1990. *Implementation of the JOBS Program in Ohio: A Process Study, First Annual Report*. Columbus, OH: Center on Education and Training for Employment.
- Lewis, M. V. and P. K. Kurth. 1992. *Implementation of the JOBS Program in Ohio: A Process Study, Third Annual Report*. Columbus, OH: Center on Education and Training for Employment.
- Lewis, M. V. and P. K. Kurth. 1993. *Interim Report on the Attitudes and Experiences of Recipients in the Ohio JOBS Program*. Columbus, OH: Center on Education and Training for Employment.

- Lurie, I. and J. L. Hagen. 1993. *Implementing JOBS: The Initial Design and Structure of Local Programs*. Albany, NY: The Nelson H. Rockefeller Institute of Government.
- Martinson, K. and D. Friedlander. 1993. *The Operation and Educational Effects of a Mandatory JOBS Program that Emphasizes Basic Education: Findings from California's GAIN Program*. Paper presented at the 1993 Annual Research Conference of the Association for Public Policy and Management.
- Riccio, J., D. Friedlander, and S. Freedman. 1994. *GAIN: Benefits, Costs, and Three-Year Impacts of a Welfare-to-Work Program*. NY: Manpower Development Research Corporation.
- Schiller, B. R. and N. Brasher. 1993. "Effects of Workfare Saturation on AFDC Caseloads." *Contemporary Policy Issues*. 11:1-11.
- U.S. Department of Health and Human Services, Administration for Children and Families. 1994. "Job Opportunities and Basic Skills Training (JOBS) Program Information Memorandum No. JOBS-ACF-IM-94-6." Memorandum to state agencies administering the JOBS program.

APPENDIX:

IMPACT ESTIMATION METHOD

In this appendix, we provide details on two aspects of the method used to estimate employment and earnings impacts in this report. First, we present more information about the models used to predict the employment and earnings which clients who were assigned to JOBS activities would have received had they not been subject to JOBS. Then, we consider the extent to which one potential source of bias -- differential selection to JOBS assignments -- may have affected the impact estimates.

PREDICTION MODELS

As described in Chapter 3, we estimated impacts of assignment to JOBS activities by comparing outcomes (total earnings and employment) actually observed for each client in the demonstration's treatment group with her estimated expected outcomes absent JOBS exposure. We estimated expected outcomes by applying coefficients from regression analyses involving the control group to each member of the treatment group.

The analysis required estimating six regression models for clients in the control group: one for each of the two outcomes (employment and total earnings) in each of the three calendar quarters of exposure (fourth, eighth, and twelfth). Ordinary least squares regression was used. The basic variables included were the same in all models, and included:

- Client's total earnings for the year prior to demonstration entry (a continuous variable measured in dollars),
- Employment in the year prior to entry (a 0-1 variable).
- The interval between first ADC receipt and demonstration entry (a continuous variable measured in years),
- Whether in a single or two-parent family at entry (a 0-1 variable),
- A series of 0-1 dummy variables identifying county residence at entry,
- Identification as a member of a JOBS target group (a 0-1 variable),
- Race (a 0-1 variable distinguishing white and nonwhite),

- Age (a continuous variable measured in years), and
- Cumulative time on ADC and non-exempt for JOBS prior to each observed quarter (a continuous variable measured in months).¹

The rationale for including the last of these variables requires elaboration. Spending more time on ADC as JOBS-mandatory greatly increased clients' chances of ever receiving a JOBS assignment. However, longer welfare receipt implies less employment and earnings. Not fully accounting for assignees' longer welfare receipt in predicting their employment and earnings absent JOBS could sharply bias predicted employment and earnings upwards. The solution employed was to include time on ADC as JOBS-mandatory as a covariate in the prediction model.

To the extent that time on ADC as JOBS-mandatory is itself affected by JOBS participation (in addition to influencing the chances of participation), including this variable in the prediction model introduces a different kind of bias, called endogeneity bias. We think that any effects here are likely to be very small. Given that it takes a relatively high proportionate impact on average total earnings to effect a significant change in rates of ADC receipt,² much of the impact on total earnings is likely to be independent of any impacts on ADC receipt. Therefore, the ratio of exogenous to endogenous variation in JOBS exposure is likely to be high enough that including this variable in our models substantially improves the resulting estimates.

IMPACTS OR SELECTION BIAS?

In this section we consider the extent to which the prediction models used generated accurate predictions of the employment and earnings assignees would have had if they had not been subject to JOBS. The key concern here is that clients assigned to a given component might differ from other clients on dimensions not captured in the prediction model which, nonetheless,

¹ R² ranged from 9 to 22 percent, with the proportion of variance explained generally declining with increasing duration since demonstration entry.

² Illustrative is the tight relationship between proportionate total earnings and ADC participation impacts across GAIN study sites both for clients from single and two-parent cases. The GAIN findings suggest about a 5:1 ratio of earnings to ADC participation impacts.

are related to the measured outcomes. First, we look at the face validity of the model; that is, the extent to which covariates cover client characteristics thought to be important in program assignments. Then we consider whether the impact estimates suggest patterns that appear to more consistent with hypothesized program effects or with selection biases.³

Does the prediction model capture likely selection mechanisms? Our prediction model does not have to predict earnings perfectly to generate unbiased estimates of component effects. However, we must be convinced that omitted variables are unrelated to program assignments.

Our knowledge of the Ohio's JOBS program suggests that caseworkers select clients for assignment to specific components on the basis of varying characteristics. In all cases, the first screen is to distinguish those who do from those who do not have barriers to employment such as an emotional/physical health problem, transportation difficulty, or other extenuating circumstance. The next screen is presence of a high school diploma/equivalent: this is a simple objective basis used to determine whether clients should be assigned to basic education. Clients with high school diplomas but no recent work experience may be assigned to CWEP, which also receives clients who opt out of basic education. The ordinary route for clients with high school diplomas and recent work experience leads to job club; some, however, may be assigned to job readiness training. Clients with high school diplomas also may be allowed to enroll (or continue enrollment) in college programs and vocational classes. Other things being equal, greater emphasis is placed on activities oriented towards more immediate employment for the primary wage earner in two-parent families than for single parents.

To summarize, a handful of general factors condition assignments: presence/absence of barriers to employment; single or two-parent case; presence/absence of high-school diploma and recent work experience; and interests and motivation.

To what extent does our model capture these criteria? The model includes several strong measures for extent of disadvantage, including recent earnings and employment, time since first received welfare, and whether clients were identified by caseworkers as JOBS target group

³ Because prediction equations included employment and earnings just preceding demonstration entry as covariates, we were unable to test whether predicted and actual earnings were equivalent prior to JOBS exposure, as recommended by Heckman and Hotz (1989).

members. The model also includes indicators for single/two-parent family, race, age, and county.

We have no direct measures for employment barriers, education, or interests and motivation. However, our variables may be reasonable proxies for these criteria. JOBS assignments apparently are heavily influenced by JOBS targeting priorities and caseworkers' determination of what clients need. To the extent that these same needs are correlated with long-term dependency, our measures of disadvantage and long-term dependency represent valid indicators. For example, if duration of welfare receipt is negatively associated with motivation, then our measure for welfare history probably provides a reasonable proxy for motivation.⁴

Do the results look like selection bias? The selection mechanisms discussed above lead to clearer expectations for error for some components than for others.

To the extent that our model does not capture job club assignees' stronger work orientation, we might predict lower levels of earnings and employment than these clients would have achieved without JOBS. The downward bias to predicted earnings and employment would have an upwards effect on estimated job club impacts. The positive effects we find are generally consistent with such a bias. However, given that a number of variables in the prediction model represent strong proxies for work orientation, the size of the effects seems too large to be solely due to selection. Furthermore, the size of job club effects are consistent with findings from earlier demonstrations in which job search was the primary service received by treatment group members (see Gueron and Pauly 1991).

Another component for which selection hypotheses are relatively unambiguous is post-secondary education. The fact that many post-secondary assignments were self-initiated (Lewis and Kurth 1992) has two implications: first, that assignees are highly motivated and, second, that enrollment may have preceded assignment by some time. Not fully capturing motivation contributes an upwards bias to estimated effects, as in the case of job club. The fact of pre-existing enrollment may cause our measures of recent work history under-state the potential for

⁴ It could be argued that peoples' motivation has relatively fixed and relatively variable components, and that the latter would not be captured very well by welfare history measures. Our measure for cumulative months of JOBS exposure partially addresses this objective, although it may inject its own bias (as discussed earlier).

future earnings. However, in the near term, we may be over-predicting short-term earnings, since we're not accounting for the fact that many clients would have been in school regardless of JOBS.⁵ Thus, selection bias could produce a pattern similar to that found in Exhibit 10.

However, the effects also are consistent with our hypothesized program impacts. In this regard, we should remember that not all post-secondary assignments pre-dated JOBS, and that many clients doubtless were assigned to this activity based on assessment results. And, although JOBS does not fund post-secondary education directly unless it is a program assignment, supportive services such as child care and the work allowance may help clients to maintain enrollment. Furthermore, a number of county CDHSs were taking advantage of the State's JOBS Student Retention Program, hailed as a highly successful initiative (Lewis and Kurth 1992).

Theory predicts that intensive assignments entail short-term opportunity costs, and the literature accords relatively large improvement in earnings and employment to occupationally-oriented post-secondary training. The time pattern of effects for post-secondary activities is consistent with our observed participation dynamics, since, unlike the case of basic education -- we expect relatively high rates of completion within the time interval examined.⁶

The chances that the observed large, negative effects for post-secondary in quarter four are spurious are weakened by a comparison of the results shown with findings for the 1990 cohort (Exhibit 14). The 1990 cohort displays even stronger negative effects on earnings and employment in quarter four for this JOBS component. We can think of no plausible reason why our models (which are fit separately for each cohort) would differ in the amount of bias in the short-term.

There are two likely explanations for the difference in short-term impacts between the 1989 and 1990 cohorts. One is that opportunity costs were greater for the 1990 cohort because

⁵ The usual interpretation of negative impacts for intensive education and training activities in the short-run is that they represent the opportunity costs of schooling for those who otherwise would have been in the job market.

⁶ Clients who had initiated training before JOBS could be expected to complete it relatively quickly, especially given that many of the assignments were to associate degree or vocational programs of two years or less. Our earlier finding that actual clock time spent in assignments to post-secondary and basic education activities is quite similar is not inconsistent with hypotheses that the outcomes of these activities are quite different.

Exhibit 14

**Impacts on Employment and Total Earnings of Ever-Assignment to Different JOBS
Activities Prior to Selected Quarters Since First JOBS-Mandatory: 1990 Cohort**

Type of Activity	Employment			Total Earnings			Number of Assignees (7)
	Predicted Mean (1)	Impact ^a (2)	Relative Impact ^b (3)	Predicted Mean (4)	Impact ^a (5)	Relative Impact ^b (6)	
Job Club							
4th Quarter	36.6%	2.4%	6.6%	\$ 817	\$ 104	12.7%	182
8th Quarter	35.5	8.7 ***	24.5	868	152	17.5	276
Basic Education							
4th Quarter	33.4%	-12.8% ***	-38.3%	\$ 600	\$ -308 ***	-51.3%	296
8th Quarter	31.0	-6.6 **	-21.3	654	-236 **	-36.1	410
Post-Secondary Ed.							
4th Quarter	33.9%	-10.9% ***	-32.2%	\$ 659	\$ -293 ***	-44.5%	182
8th Quarter	31.1	.8	2.6	679	77	11.3	298
Job Readiness							
4th Quarter	40.1%	-5.3%	-13.2%	\$ 903	\$ -190	-21.0%	132
8th Quarter	38.0	4.1	10.8	929	116	12.5	185
CWEP							
4th Quarter	32.3%	-7.9% **	-24.5%	\$ 628	\$ -135	-21.5%	242
8th Quarter	27.8	.2	.7	597	-45	-7.5	399
Any Activity							
4th Quarter	34.6%	-6.7%	-19.4%	\$ 628	\$ -167	-24.1%	968
8th Quarter	31.8	.6	1.9	712	-5	-.7	1,312

* Statistically significant at the 10% level; ** at the 5% level; *** at the 1% level.

^a The impact is the difference between the *actual* treatment-group mean (not shown) and the *predicted* mean without JOBS (Columns 1 and 4).

^b The relative impact is the impact expressed as a proportion of the predicted mean.

the average duration of assignees' participation in post-secondary education by quarter four was nearly three times greater than that of assignees in the 1989 cohort (see Exhibit 9). Another possibility is that opportunity costs for the 1990 cohort were greater because they had stronger labor force attachment than the 1989 cohort. A majority of the 1990 cohort was just beginning a spell of ADC receipt when first exposed to JOBS, whereas a majority of 1989 cohort members were from ongoing cases.⁷

In contrast to job club and post-secondary education, the nature of selection effects on predicted earnings and employment for basic education and CWEP are less clear. In both cases, there seems to be both positive and negative selection going on, and the argument that either is inadequately proxied by variables in our model is less convincing.

Clients lacking diplomas may be the least motivated segment of the caseload overall; and, to the extent that this deficit is not captured by other measures of disadvantage in our model, we will tend to over-estimate such assignees' economic prospects. On the other hand, according to the process study, some of the least motivated clients may have refused basic education and been placed in CWEP as a last resort, leaving those assigned to basic education somewhat better off than the average client without a high school diploma.

Selections into CWEP reflect a mixture of positive and negative factors. On the positive side, this activity often is chosen for clients with a high school diploma but little work experience, who may or may not have a positive orientation towards work. On the negative side, CWEP is used as a last resort assignment for those who do not succeed in other components. Beyond these mechanisms, CWEP also served in many instances as a concurrent activity to help clients meet their required 20 hours of activity per week. In sum, it is not immediately clear that assignments to CWEP, on net, are driven by criteria which would not be captured by our models.⁸

If it is difficult to posit clear selection biases, do the basic education and CWEP results seem to be consistent with theory and prior research? Given low educational attainment and poor

⁷ See Fein et al. (1994, Exhibit 2.1).

⁸ Effect estimates for the 1990 cohort (Exhibit 10) also suggest that longer average participation in both basic education and CWEP a year after demonstration entry compared with 1989 entrants may account for larger observed negative effects on earnings in quarter four.

basic skills for a substantial portion of clients assigned to basic education, it would be surprising to see early impacts. In fact, negative effects for basic education persist and are larger than those for any of the other components. These effects are consistent with theory predicting that assignees to basic education will experience short-term opportunity costs. Although clients assigned to basic education as a group may have serious deficits, the process study found that there also was a sizable minority of assignees who were probably within striking range of a GED.⁹ Findings in Chapter 3 indicating that such clients account for much of the positive movement in impacts in quarter twelve provide another instance where the results fit with our substantive hypotheses. Findings for CWEP in the literature are inconsistent and tend to support our finding of no impacts for this activity.¹⁰

On the whole, we think that the findings look more like effects of employment and training activities than biases arising from selection. The basis for this conclusion is somewhat fragile, given that theory and empirical evidence offer only general guidance as to what we should expect. The conclusions also need to be carefully qualified, since some estimated effects (e.g., job club, post-secondary/skill training) are likely to be more affected by selectivity than others.

⁹ Although the process study did not measure functional grade levels, it did report impressionistic data suggesting that about 10 percent of ADC clients enrolled in GED classes received diplomas each year. This figure is quite close to estimates provided elsewhere (e.g., Herr and Halpern 1991). To the 10 percent of current attenders who will graduate in a given year, one must add an additional number expected to graduate in future years.

¹⁰ See Brock et al. (1993) for a review of early studies of unpaid work experience.



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